MITSUBISHI ELECTRIC

LCD MONITOR

MODEL

MLM400

User Manual

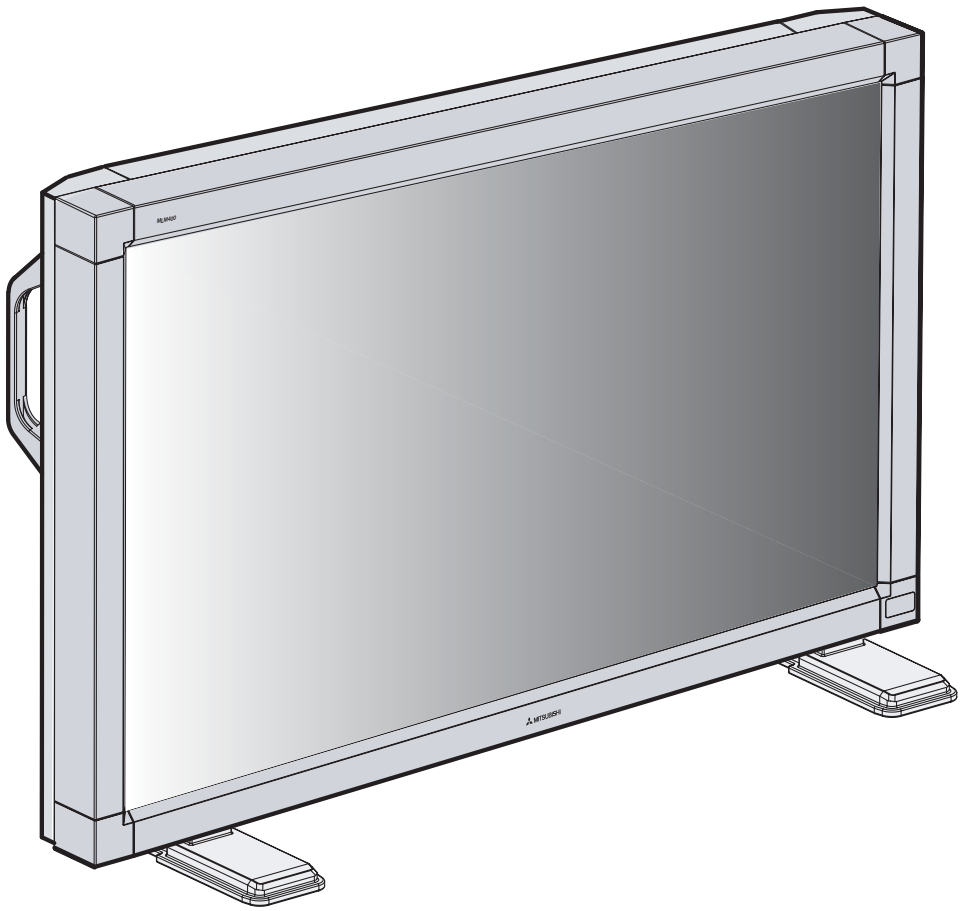


Table of Contents

Important Information 1
Safety Precautions, Maintenance, & Recommended Use 2
Contents 3
Attaching LCD Options 4
Parts Name and Functions
- Control Panel 5
- Terminal Panel 6
- Wireless Remote Control 7
- Operating Range for the Remote Control 8
- Handling the Remote Control 8

Setup Procedure 9
Connections
- Wiring Diagram 10
- Connecting the LCD Monitor to a PC 11
- Connecting to a Macintosh Computer 12
- Connecting to a Computer with a Digital Output 13
- Connecting to a VCR or Laser Disc Player 14
- Connecting to a DVD Player 15
- Connecting to a Stereo Amplifier 16

Basic Operation
- Power On and Off modes 17
- Power Indicator 18
- When Using Power Management Function 18
- Selecting a video source 18
- Picture Size 18
- Picture Mode 18
- On-screen Information 18

On-Screen-Menu Controls
- Computer 19
- DVD & HD 23
- AV INPUT 25

Using the LCD with a Personal Computer (PC) 28
Features 30
Troubleshooting 31
References 32
Specifications 33
Limited Warranty 34

Important Information

WARNING

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. ALSO, DO NOT USE THIS UNIT'S POLARIZED PLUG WITH AN EXTENSION CORD RECEPTACLE OR OTHER OUTLETS UNLESS THE PRONGS CAN BE FULLY INSERTED. REFRAIN FROM OPENING THE CABINET AS THERE ARE HIGH VOLTAGE COMPONENTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION

CAUTION:TO REDUCE THE RISK OF ELECTRIC SHOCK, MAKE SURE POWER CORD IS UNPLUGGED FROM WALL SOCKET. TO FULLY DISENGAGE THE POWER TO THE UNIT, PLEASE DISCONNECT THE POWER CORD FROM THE AC OUTLET. DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol warns user that uninsulated voltage within the unit may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any part inside this unit.

This symbol alerts the user that important literature concerning the operation and maintenance of this unit has been included. Therefore, it should be read carefully in order to avoid any problems.

Canadian Department of Communications Compliance Statement

DOC: This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

C-UL: Bears the C-UL Mark and is in compliance with Canadian Safety Regulations according to CAN/CSA C22.2 No. 60950.

FCC Information

1. Use the attached specified cables with the MLM400 (L40HV201) color monitor so as not to interfere with radio and television reception.
   (1) Please use the supplied power cord or equivalent to ensure FCC compliance.
   (2) Please use the supplied shielded video signal cable, 15-pin mini D-SUB to 15-pin mini D-SUB.
2. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
   - Reorient or relocate the receiving antenna.
   - Increase the separation between the equipment and receiver.
   - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
   - Consult your dealer or an experienced radio/TV technician for help.

If necessary, the user should contact the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

Safety Precautions, Maintenance & Recommended Use

Safety Precautions and Maintenance

FOR OPTIMUM PERFORMANCE, PLEASE NOTE THE FOLLOWING WHEN SETTING UP AND USING THE MLM400 LCD COLOR MONITOR:

- DO NOT OPEN THE MONITOR. There are no user serviceable parts inside and opening or removing covers may expose you to dangerous shock hazards or other risks. Refer all servicing to qualified service personnel.
- Do not spill any liquids into the cabinet or use your monitor near water.
- Do not insert objects of any kind into the cabinet slots, as they may touch dangerous voltage points, which can be harmful or fatal or may cause electric shock, fire or equipment failure.
- Do not place any heavy objects on the power cord. Damage to the cord may cause shock or fire.
- Do not place this product on a sloping or unstable cart, stand or table, as the monitor may fall, causing serious damage to the monitor.
- When operating the MLM400 monitor with its AC 220-240V power supply, use a power supply cord that matches the power supply voltage of the AC power outlet being used. The power supply cord you use must have been approved by and comply with the safety standards of your country. (Type H05VV-F 3G 1mm^2 should be used in Europe)
- In UK, use a BS-approved power cord with molded plug having a black (13A) fuse installed for use with this monitor. If a power cord is not supplied with this monitor, please contact your supplier.
- Do not place any objects onto the monitor and do not use the monitor outdoors.
- The inside of the fluorescent tube located within the LCD monitor contains mercury.
- Do not bend power cord.
- Do not use monitor in high temperature, humid, dusty, or oily areas.
- If glass is broken, handle with care.
- Do not cover vent on monitor.
- If monitor or glass is broken, do not come in contact with the liquid crystal and handle with care.
- Allow adequate ventilation around the monitor so that heat can properly dissipate. Do not block ventilated openings or place the monitor near a radiator or other heat sources. Do not put anything on top of monitor.
- The power cable connector is the primary means of detaching the system from the power supply. The monitor should be installed close to a power outlet which is easily accessible.
- Handle with care when transporting. Save packaging for transporting.
- Please follow the bylaws or rules of your municipality to dispose of the tube properly.
- Keep the holes on the back of the LCD clean of dirt and dust.
  It is recommended to wipe holes with a soft cloth a minimum of once per year.

CAUTION

Immediately unplug your monitor from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the monitor.
- If the monitor has been exposed to rain or water.
- If the monitor has been dropped or the cabinet damaged.
- If the monitor does not operate normally by following operating instructions.

Recommended Use

CAUTION

CORRECT PLACEMENT AND ADJUSTMENT OF THE MONITOR CAN REDUCE EYE, SHOULDER AND NECK FATIGUE. CHECK THE FOLLOWING WHEN YOU POSITION THE MONITOR:

- For optimum performance, allow 20 minutes for warm-up.
- Rest your eyes periodically by focusing on an object at least 20 feet away. Blink often.
- Position the monitor at a 90˚ angle to windows and other light sources to minimize glare and reflections.
- Clean the LCD monitor surface with a lint-free, nonabrasive cloth. Avoid using any cleaning solution or glass cleaner.
- Adjust the monitor's brightness and contrast controls to enhance readability.
- Avoid displaying fixed patterns on the monitor for long periods of time to avoid image persistence (afterimage effects).
- Get regular eye checkups.
- The lamp of backlight contains mercury. Please handle it appropriately in case of disposal.

Ergonomics

To realize the maximum ergonomics benefits, we recommend the following:

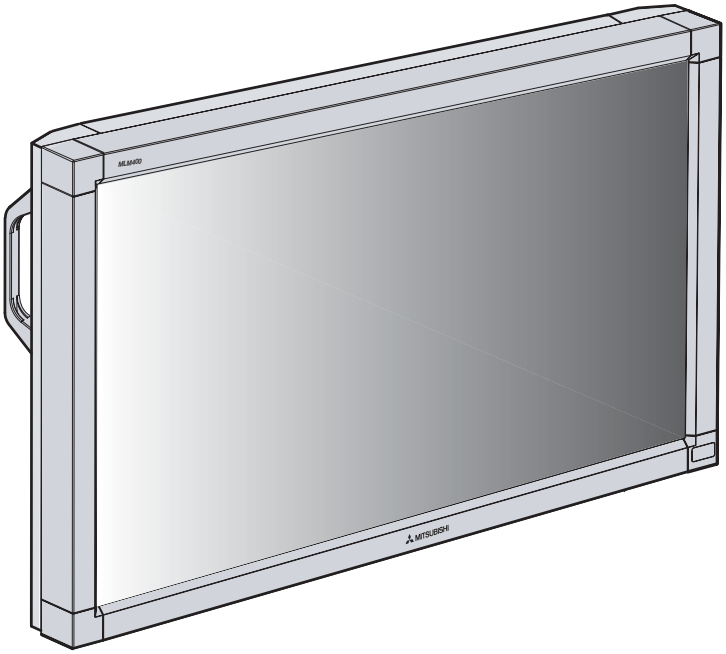
- Use the preset Size and Position controls with standard signals
- Use the preset Color Setting
- Use non-interlaced signals with a vertical refresh rate between 58-62Hz
- Do not use primary color blue on a dark background, as it is difficult to see and may produce eye fatigue to insufficient contrast

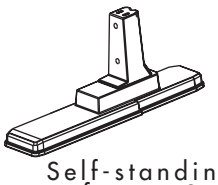
For more detailed information on setting up a healthy work environment, write the American National Standard for Human Factors Engineering of Visual Display Terminal Workstations – ANSI-HFS Standard No. 100-1988 – The Human Factors Society, Inc. P.O. Box 1369, Santa Monica, California 90406.

Contents

Your new MLM400 monitor box* should contain the following:

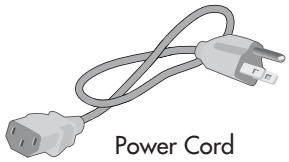
- LCD monitor
- Power Cord (3m)
- Video Signal Cable – SC-B113 (4m)
- User's Manual
- Wireless Remote Control and AA Batteries
- Clamper x 2
- Screw (M4 x 10) x 2
- CD-ROM
- Ferrite Core x 4
- Self-standing feet x 2
- Screw (M5 x 40) x 4
- Band x 3



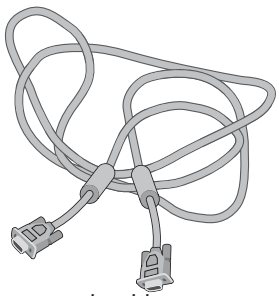


Self-standing feet x 2

Screw (M5 x 40) for stand x 4



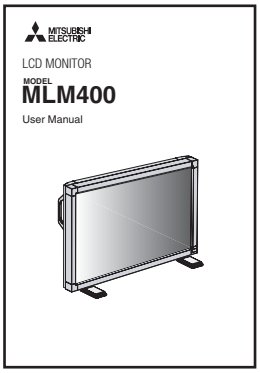
Power Cord



Video Signal Cable
(D-SUB to D-SUB Cable)

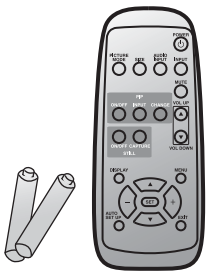
Screw (M4 x 10) x 2

Clamper x 2

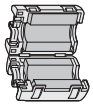


User's Manual

CD-ROM



Wireless Remote Control and AA Batteries



Ferrite Core x 4

Band x 3

**Install an attached stand at the time of unpacking when it uses with the stand.*
**Remember to save your original box and packing material to transport or ship the monitor.*

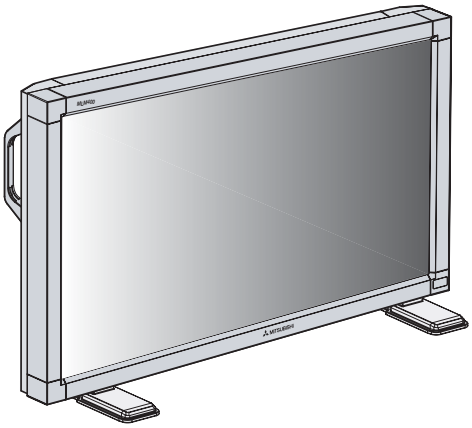
The following components are available to use with the MLM400. To obtain the optional components and additional information, contact Customer Service at (888) 307-0309.

- Macintosh Cable Adapter
- External Speakers

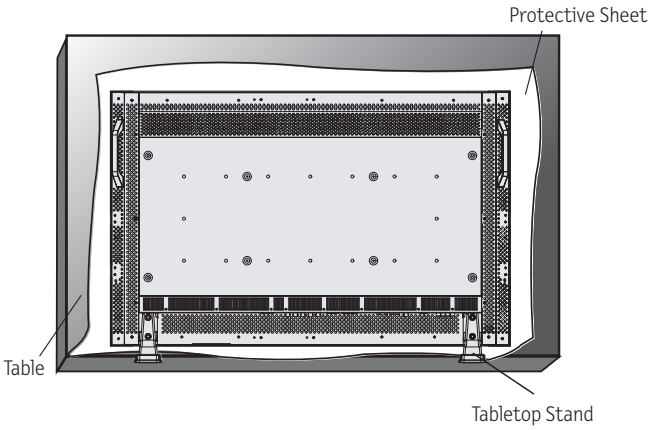
Attaching LCD Options

You can attach mounting accessories to the LCD monitor in one of the following two ways:

1. In the upright position



2. Lay the screen face down



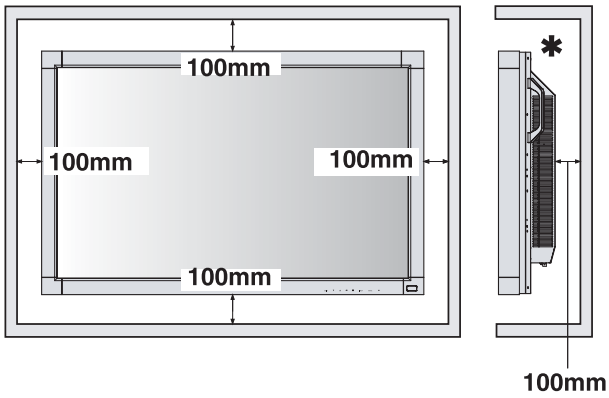
To avoid damaging the screen face, place the protective sheet on the table to lay the LCD on. The protective sheet was wrapped around the LCD in the original packaging.

This device cannot be used or installed without the Tabletop Stand or other mounting accessory. For proper installation it is strongly recommended to use a trained, Mitsubishi authorized service person. Failure to follow Mitsubishi standard mounting procedures could result in damage to the equipment or injury to the user or installer. Product warranty does not cover damage caused by improper installation. Failure to follow these recommendations could result in voiding your warranty.

When using mounting accessories, other than Mitsubishi compliant and approved, they must be VESA-compatible mounting method. Mitsubishi strongly recommends using screws M6 size and 8mm in length. If using screws longer than 8mm, check the depth of the hole.
(Recommended Fastern Force: 274 ~ 362N•cm)
Mitsubishi recommends using mounting interface that comply with UL1678 standard in North America.

Ventilation Requirements for enclosure mounting

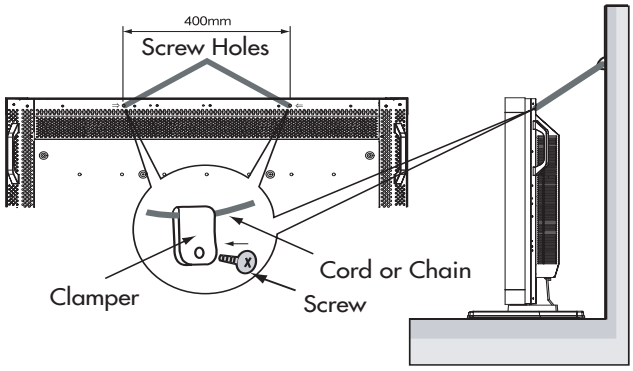
To allow heat to disperse, leave space between surrounding objects as shown in the diagram to the right.



*Ambient temperature should be less than 40 deg C

To avoid falling down

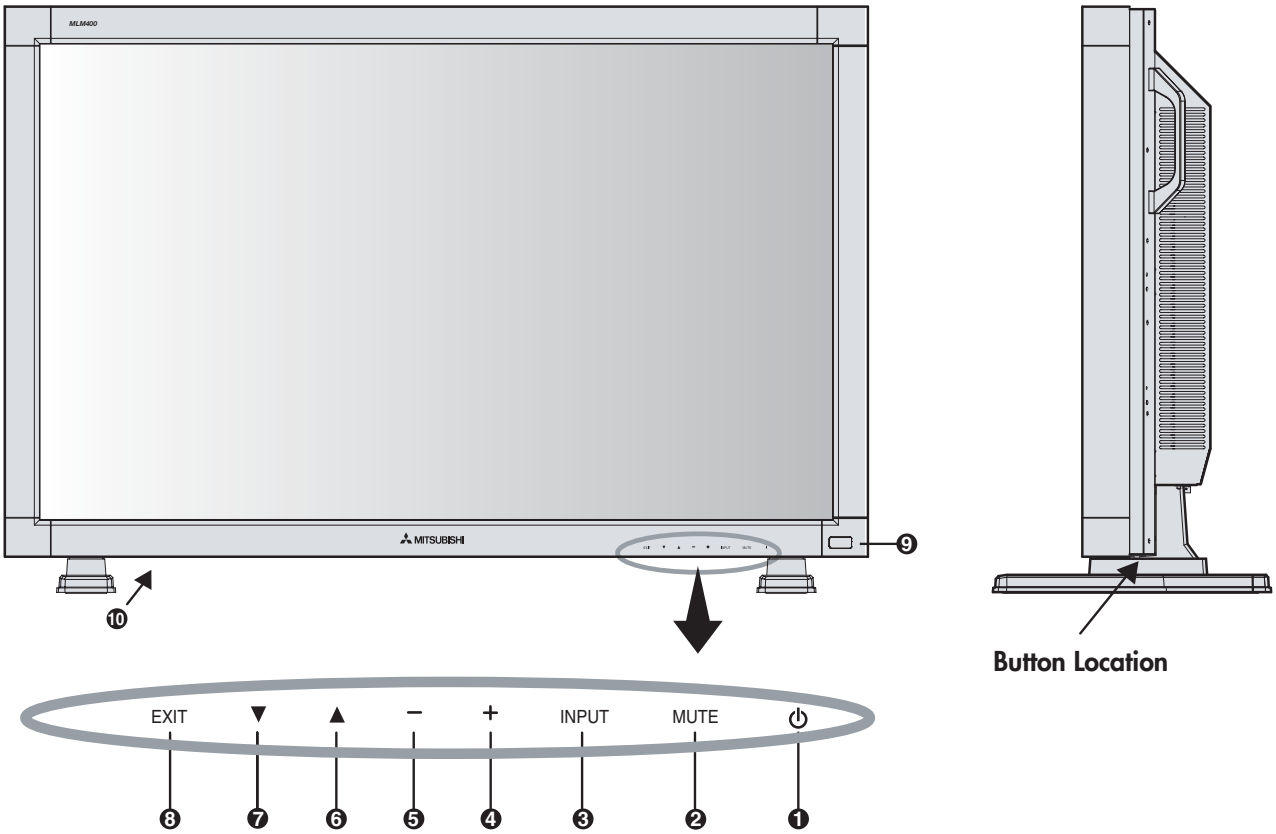
Fasten the LCD monitor to a wall using a cord or chain which is sufficient to support the weight of the LCD monitor (approx. 31.5kg).



Before moving the LCD monitor, the cord or chain should be removed.

Parts Name and Functions

Control Panel



❶ POWER button (⏻)

Switches the power on/off.

NOTE: The Main Power Switch must be in the ON position for this button to work.

❷ MUTE button

Switches the audio mute ON/OFF.

❸ INPUT button

Acts as SET button with on-screen menu.

Selects the signal connected with the RGB input connector. (Toggle switches between [RGB1], [RGB2], [RGB3], [DVD/HD], or [VIDEO].)

❹ PLUS (+) button

Acts as (+) button to increase the adjustment with on-screen menu.

Increase the audio output level when the on-screen menu is turned off.

❺ MINUS (-) button

Acts as (-) button to decrease the adjustment with on-screen menu.

Decrease the audio output level when the on-screen menu is turned off.

❻ UP (▲) button

Activates the on-screen menu when the on-screen menu is turned-off.

Acts as ▲ button to move the highlighted area up to select the adjustment with on-screen menu.

❼ DOWN (▼) button

Activates the on-scren menu when the on-screen menu is turned-off.

Acts as ▼ button to move the highlighted area down to select the adjustment with on-screen menu.

❽ EXIT button

Activates the on-screen menu when the on-screen menu is turned-off.

Acts as EXIT button to move to previous menu with OSM menu.

❾ Remote control sensor and Power indicator

Receives the signal from the remote control (when using the wireless remote control). See also page 8.

Glows green when the LCD monitor is in active and glows red when the LCD is in POWER OFF mode. When the LCD is in power save mode, it will glow both green and red.

❿ Main Power Switch

Rocker Switch for the main power on/off.

NOTE: This switch must be in the ON position for the Power button to work.

⓫ Control Key Lock Mode

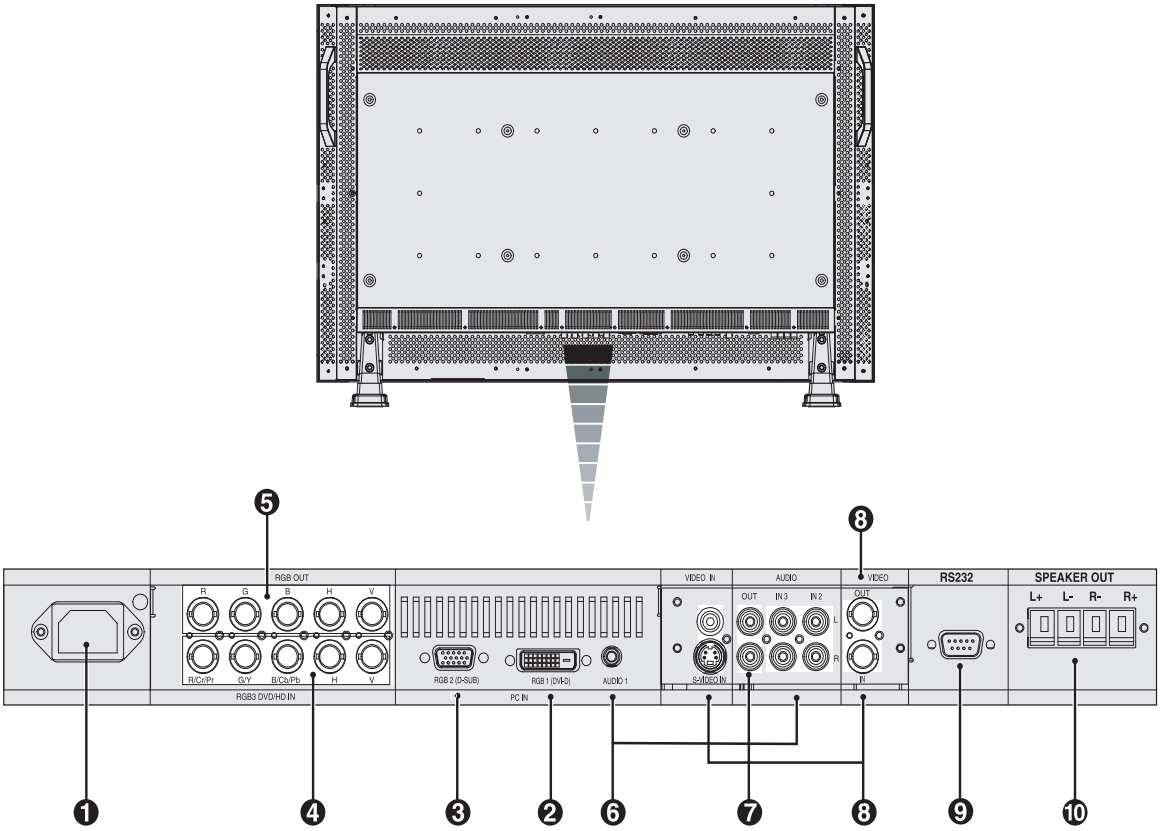
This control completely locks out access to all Control Key functions after three (3) seconds.

To activate the control key lock function, press both of "▼" and "▲" and hold down simultaneously.

To resume back to user mode, press both "▼" and "▲" and hold simultaneously for three (3) seconds.

Parts Name and Functions *–continued*

Terminal Panel



❶ AC IN connector
Connects with the supplied power cord.

❷ RGB 1 IN (DVI-D)
To input digital RGB signals from a computer having a digital RGB output.
* This connector does not support analog input.

❸ RGB 2 IN (mini D-Sub 15 pin)
To input a analog RGB signals from a personal computer or other RGB equipment.

❹ RGB 3 DVD/HD [R/Cr/Pr, G/Y, B/Cb/Pb, H, V] (BNC)
IN connector: To input the analog RGB signals or signals from other RGB equipment. Also for connecting equipment such as a DVD player or HDTV laser disc player. A Sync-on-Green signal can be connected to the G/Y connector.

❺ RGB OUT connector (BNC)
To output the signal from the RGB 2 or RGB 3 DVD/HD IN connector.

❻ AUDIO IN 1,2,3
To input audio signal from external equipment such as a computer, VCR or DVD player.

❼ AUDIO OUT
To output the audio signal from the AUDIO IN 3 jack.

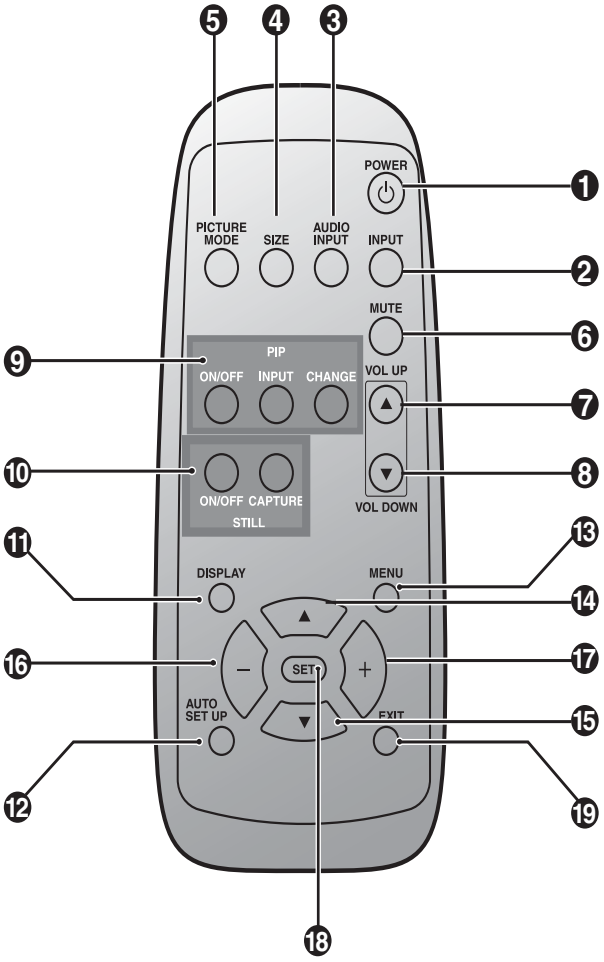
❽ VIDEO
VIDEO IN connector (BNC and RCA): To input a composite video signal. BNC and RCA are not available at the same time. (Use only one input).
VIDEO OUT connector (BNC): To output the composite video signal from the VIDEO IN connector.
S-VIDEO IN connector (DIN 4 pin): To input the S-video (Y/C separate signal).

❾ EXTERNAL CONTROL (mini D-Sub 9 pin) RS232
IN connector: Use when operating the LCD monitor from the RGB equipment like a computer.

❿ EXTERNAL SPEAKER TERMINAL
To output the audio signal from AUDIO 1, 2 or 3 jack.

Parts Name and Functions *–continued*

Wireless Remote Control



❶ POWER button

Switches the power on/off.

* If Power Indicator is not glowing, then no controls will work.

❷ INPUT button

Selects from input signal, [RGB1], [RGB2], [RGB3], [DVD/HD], [VIDEO].

❸ AUDIO INPUT button

Selects from input audio signal, [AUDIO1], [AUDIO2], [AUDIO3]

❹ SIZE button

Selects picture size, [FULL], [NORMAL], [WIDE]. See page 18.

❺ PICTURE MODE button

Selects from picture mode, [HIBRIGHT], [STANDARD], [sRGB], [CINEMA].

HIBRIGHT: for moving image such as DVD

STANDARD: for images

sRGB: for text based images

CINEMA: for movies. See page 18.

❻ MUTE button

To on/off the mute function.

❼ VOLUME UP button

Increase the audio output level.

❽ VOLUME DOWN button

Decrease the audio output level.

❾ PIP (Picture In Picture) button

ON/OFF button: Toggle switches between PIP-ON/ POP-ON/OFF.

INPUT button: Select the 'picture in picture' input signal.

CHANGE button: Replaces to the main picture and sub picture.

Sub Picture

Main Picture	RGB1	RGB2	RGB3	DVD/HD	VIDEO
RGB1	–	–	–	✓	✓
RGB2	–	–	–	–	✓
RGB3	–	–	–	–	✓
DVD/HD	–	–	–	–	–
VIDEO	–	✓	✓	–	–

Note: The aspect ration of PIP synchronizes with a setup in the Main Picture.

❿ STILL button

ON/OFF button: To on/off the still picture mode.

CAPTURE button: Capture the new picture.

⓫ DISPLAY button

To turn the on-screen information on/off. See page 18.

⓬ AUTO SETUP button

To enter the auto setup menu. See page 21.

⓭ MENU button

To on/off the menu mode.

⓮ UP button

Acts as ▲ button to move the highlighted area up to select the adjustment with on-screen menu.

In PIP mode, the small screen moves up.

⓯ DOWN button

Acts as ▼ button to move the highlighted area down to select the adjustment with on-screen menu.

In PIP mode, the small screen moves down.

⓰ MINUS button decrease

Acts as (-) button to decrease the adjustment with on-screen menu.

In PIP mode, the small screen moves left.

⓱ PLUS button increase

Acts as (+) button to increase the adjustment with on-screen menu.

In PIP mode, the small screen moves right.

⓲ SET button

Acts as SET button with on-screen menu.

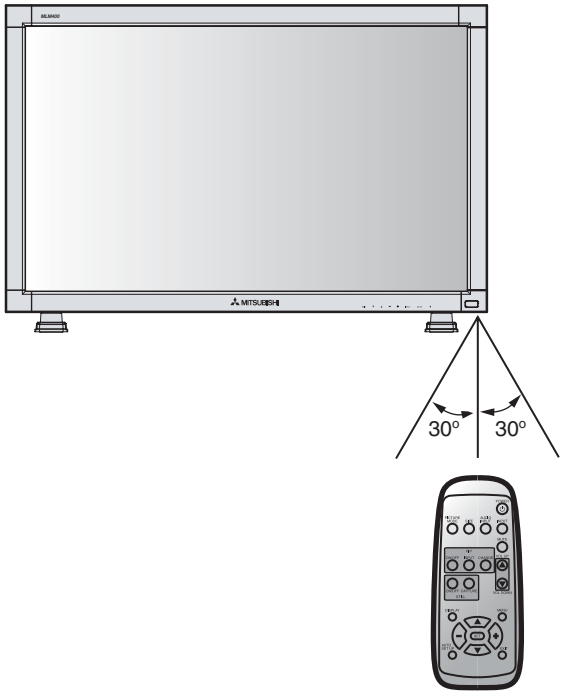
⓳ EXIT button

Turn to previous on-screen menu.

Parts Name and Functions *–continued*

Operating Range for the Remote Control

Point the top of the remote control toward the LCD monitor's remote sensor during button operation.
Use the remote control within a distance of about 7 m/23 ft. from the front of the LCD monitor's remote control sensor and at a hori- zontal and vertical angle of within 30° within a distance of about 3 m/10 ft.



Caution
The remote control system may not function when direct sunlight or strong illumination strikes the remote control sensor of the LCD monitor, or when there is an object in the path.

Handling the remote control

* Other than to install the batteries, do not open the remote.
* Do not allow water or other liquid to splash onto the remote control. If the remote control gets wet, wipe it dry immediately.
* Avoid exposure to heat and steam.

Setup Procedure

1. Determine the installation location

CAUTION

Installing your LCD display must be done by a qualified technician. Contact your dealer for more information.

CAUTION

MOVING OR INSTALLING THE LCD MONITOR MUST BE DONE BY TWO OR MORE PEOPLE. Failure to follow this caution may result in injury if the LCD monitor falls.

IMPORTANT

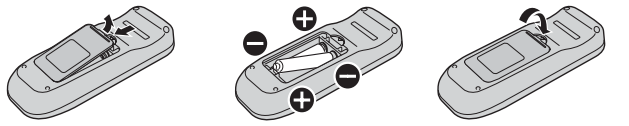
Lay the protective sheet, which was wrapped around the LCD monitor when it was packaged, beneath the LCD monitor so as not to scratch the panel.

2. Install the remote control batteries

The remote control is powered by 1.5V AA batteries. To install or replace batteries:

1. Press and slide to open the cover.
2. Align the batteries according to the (+) and (–) indications inside the case.
3. Replace the cover.

① Remove the cover ② Insert the batteries ③ Replace the cover



CAUTION

Incorrect usage of batteries can result in leaks or bursting. Mitsubishi recommends the following battery use:

- Place "AA" size batteries matching the + and - signs on each battery to the + and - signs of the battery compartment.
- Do not mix battery brands.
- Do not combine new and old batteries. This can cause a shorten life or liquid leakage of batteries.
- Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment. Don't touch exposed battery acid, it cause damage to your skin.
  NOTE: If you do not intend to use the Remote Control for a long period, remove the batteries.

3. Connect external equipment (See page 10-16)

- To protect the connected equipment, turn off the main power before making connections.
- Refer to your equipment user manual.

4. Connect the supplied power cord

- The equipment should be installed close to a power outlet and should be easily accessible.
- Fully insert the prongs into the power outlet socket. Loose connection may cause image degradation.

5. Switch on the power of all the attached external equipment

When connected to a computer, turn the computer on first.

6. Operate the attached external equipment

Display the signal on the external equipment you wish.

7. Adjust the sound

Make adjustments when adjustment of the volume is required.

8. Adjust the screen (See pages 19-27)

Make adjustments when adjustment of the screen display position.

9. Adjust the image (See page 19-27)

Make adjustments when picture adjustment such as the brightness or contrast is required.

10. When monitor is installed in the portrait position

- Remove the stand (feet).
- Left edge should be upper from front view.

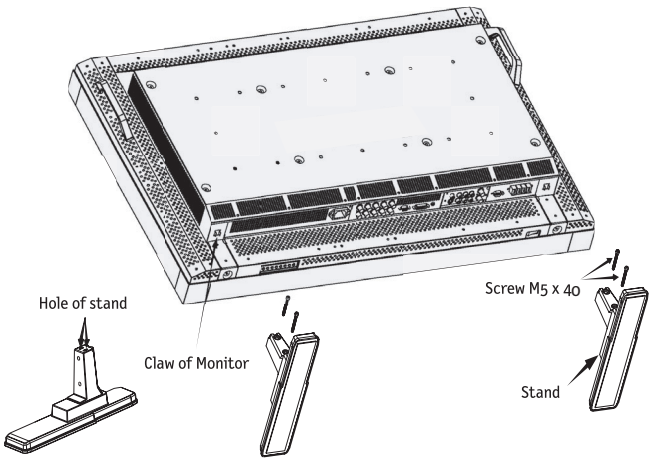
11. When installing the monitor to a wall

How to remove the stand

1. Spread the protective sheet on the flat surface, such as a desk.
2. Place monitor on the protective sheet.
3. Remove 2 screws by screwdriver and place them in a safe place for reuse.

How to install stand

1. Please turn monitor off.
2. Insert claws of monitor to stand holes until clicks.
3. Fasten 2 screws(M5 x 40mm) on both sides of the monitor. Torque 280 ~ 300N•cm.

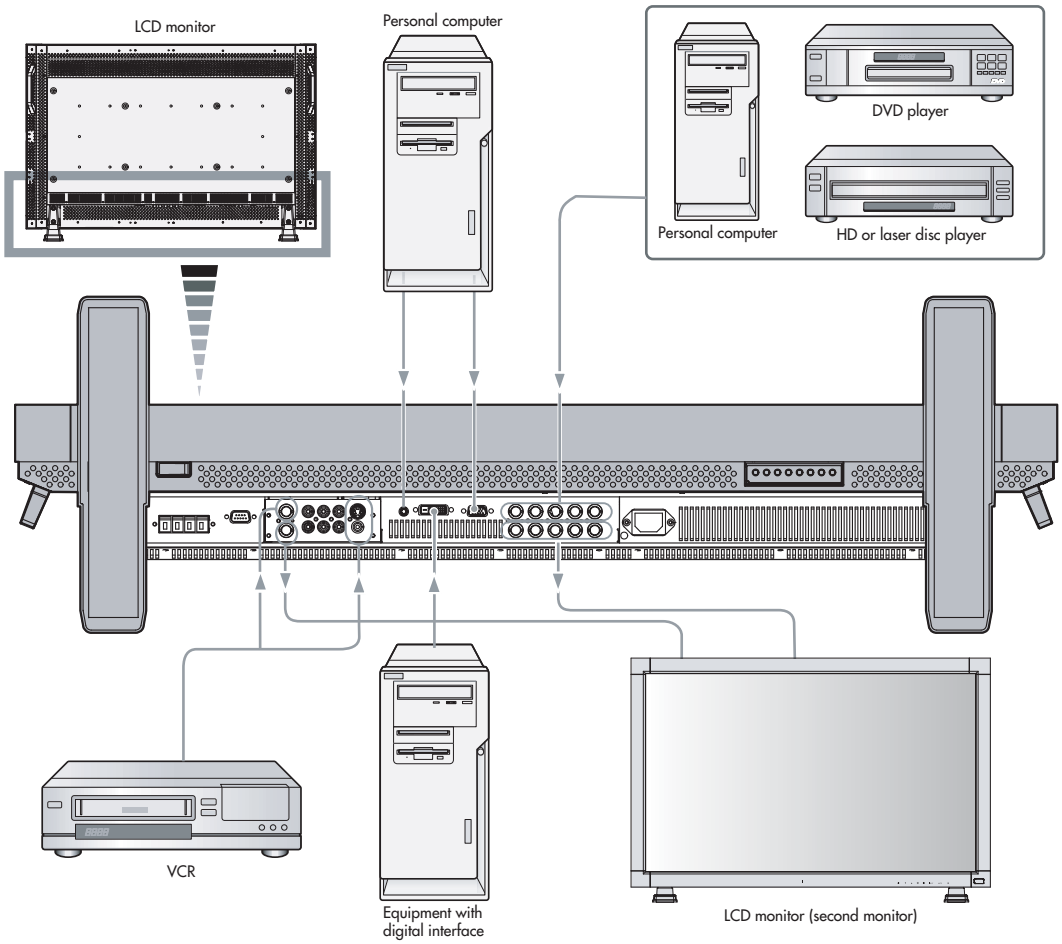


Connections

Before making connections:

* First turn off the power of all the attached equipment and make connections.
* Refer to the user manual included with each separate piece of equipment.

Wiring Diagram



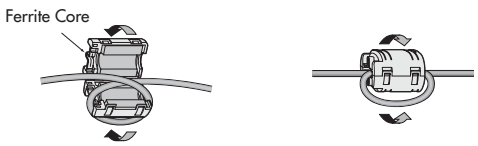
Attaching the Ferrite Core

Attach the Ferrite Core to PC Audio Cable and S-VIDEO Cable. Use of the cable without mounting the ferrite core will result in the occurrence of noise.

• For PC Audio Cable

1 Open the ferrite core and clamp it on the PC Audio cable.

2 Close the ferrite core.



• For S-VIDEO Cable

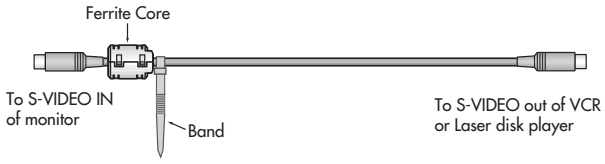
1 Open the ferrite core and clamp it on the S-VIDEO Cable.

2 Close the ferrite core.

Mounting Position of Ferrite Core

Attach the Ferrite Core to the end of PC Audio Cable. Only AUDIO 1 side of monitor.

Attach the Ferrite Core to the end of S-VIDEO Cable. Only S-VIDEO IN side of monitor.

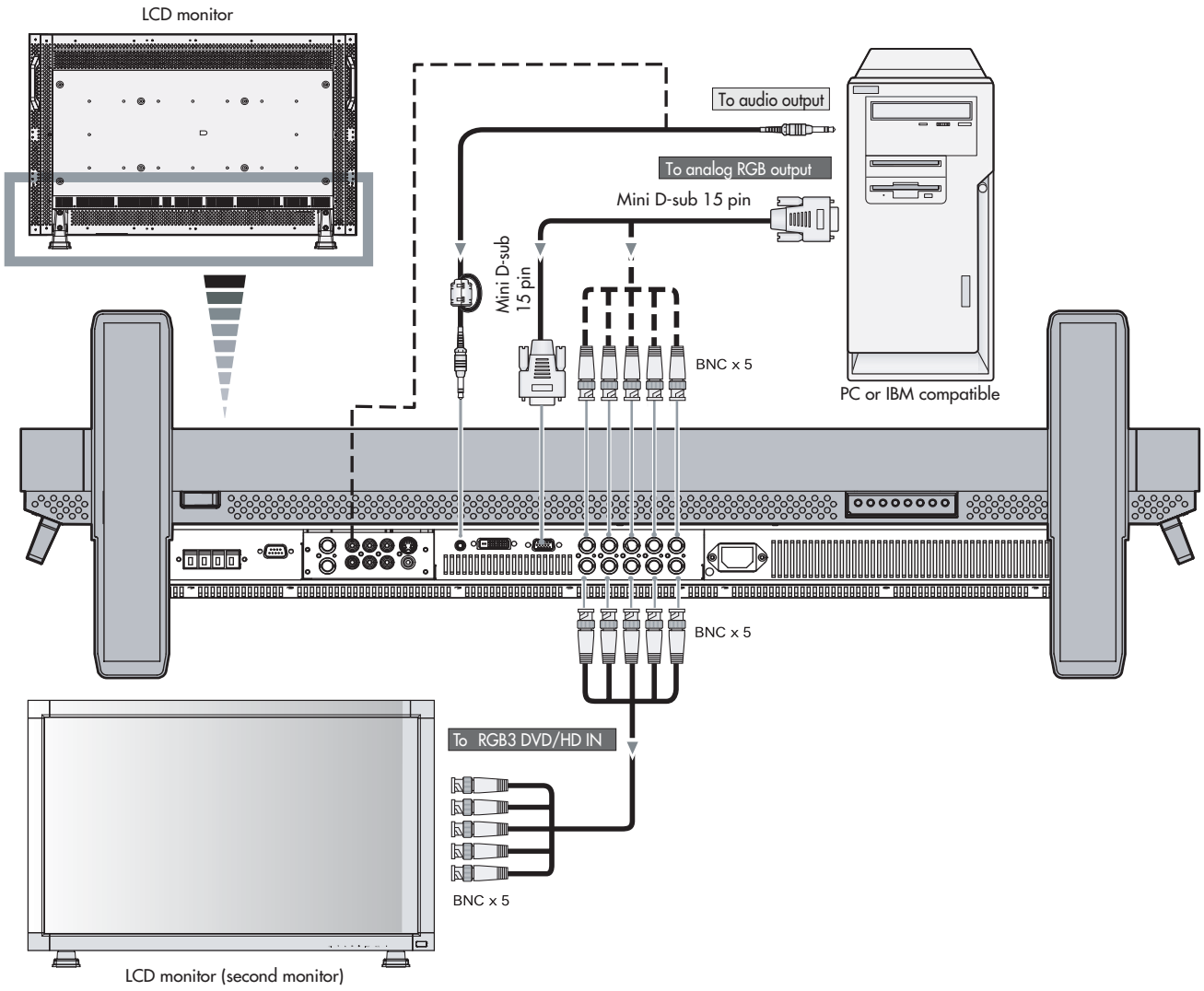


Connections *–continued*

Connecting the LCD Monitor to a PC

Connecting your computer to your LCD monitor will enable you to display your computer's screen image.
Some video cards may not display an image correctly.

- To connect the RGB 2 IN connector (mini D-sub 15 pin) on the LCD monitor, use the provided RGB signal cable (mini D-sub 15 pin to mini D-sub 15 pin).
- To connect the RGB 3 DVD/HD IN connector (BNC) on the LCD monitor, use a signal cable (mini D-sub 15 pin to BNC x 5). Select RGB 3 from the INPUT button.
  When connecting one or more LCD monitors, use the RGB OUT connector (BNC).
- The AUDIO IN 1, 2 and 3 can be used for audio input. For connection, select AUDIO 1, 2 or 3 from the AUDIO INPUT button.

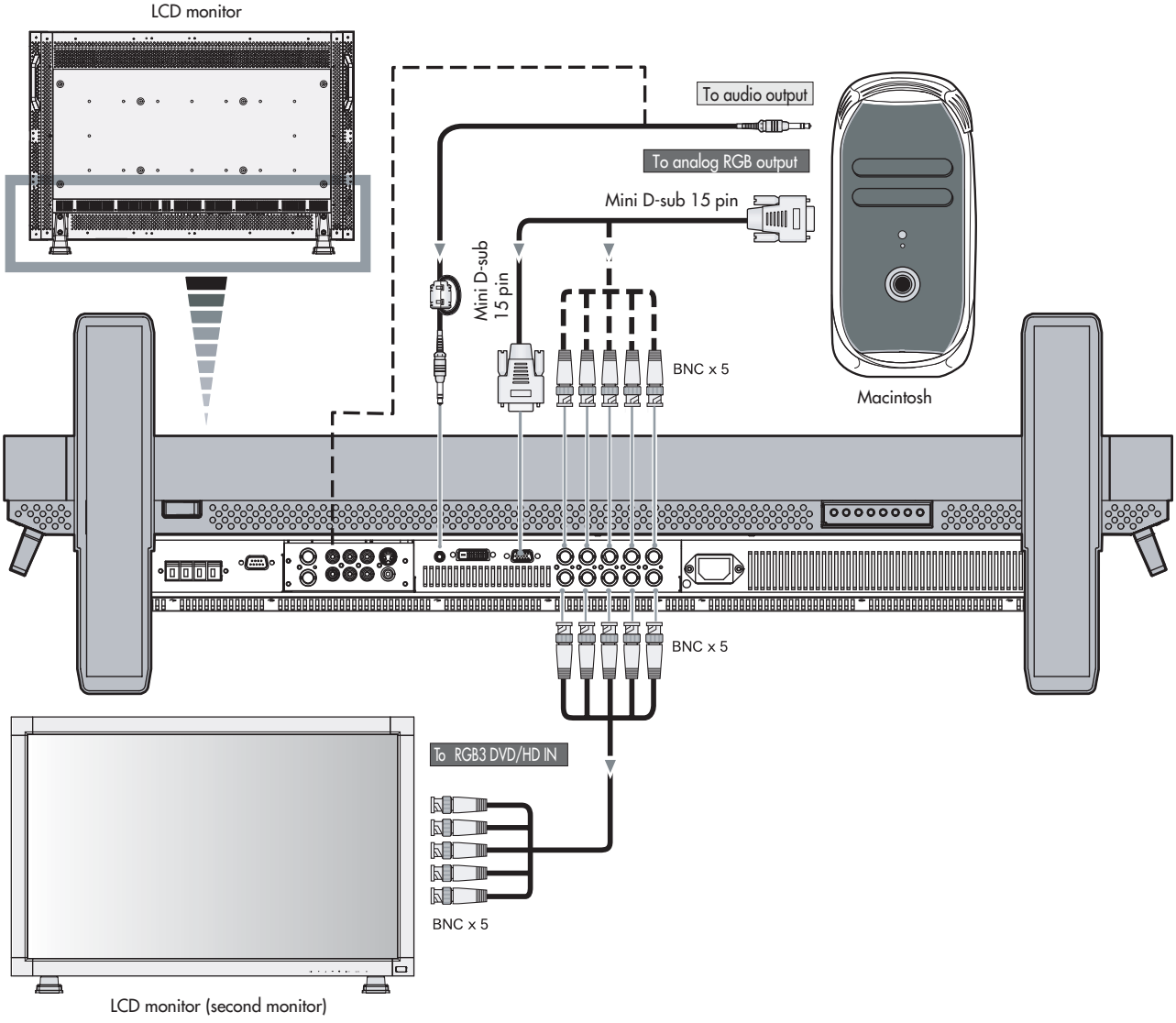


Connections *–continued*

Connecting to a Macintosh® Computer

Connecting your Macintosh® computer to your LCD monitor will enable you to display your computer's screen image. Some video cards or drivers may not display images correctly.

- To connect the RGB 2 IN connector (mini D-sub 15 pin) on the LCD monitor, use the provided RGB signal cable (mini D-sub 15 pin to mini D-sub 15 pin).
  For older Macintosh® computers, use Macintosh cable adapter to connect to your Macintosh's video port.
  NOTE: To obtain the Macintosh cable adapter call Mitsubishi Digital Electronics America, Inc. at (888) 307-0309
- To connect the RGB 3 DVD/HD IN connector (BNC) on the LCD monitor, use the signal cable available separately (mini D-sub 15 pin to BNC x 5).
- If you use with a Macintosh PowerBook, set "Mirroring" to off.
  Refer to your Macintosh's owner's manual for more information about your computer's video output requirements and any special identification or configuring your monitor's image and monitor may require.
- The AUDIO IN 1, 2 and 3 can be used for audio input. For connection, select AUDIO 1, 2 or 3 from the AUDIO INPUT button.



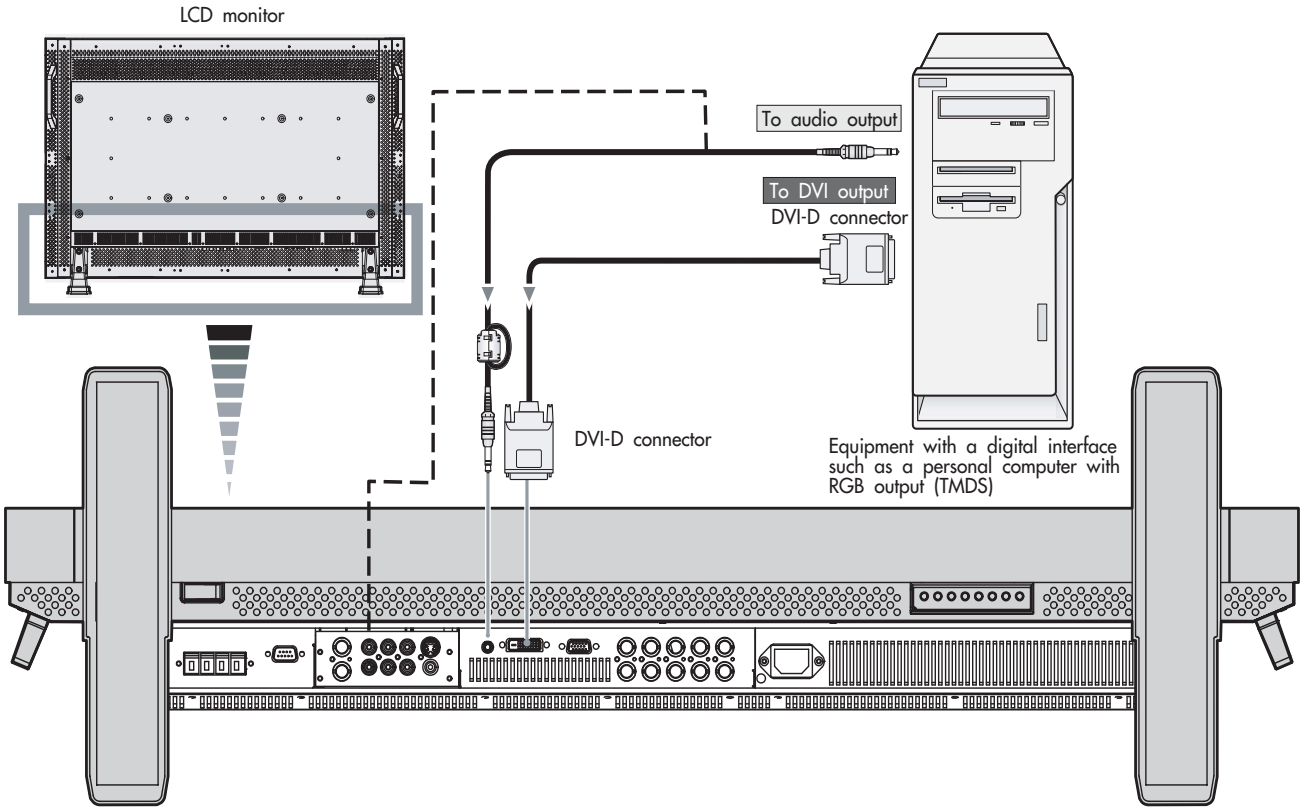
Connections *–continued*

Connecting to a Computer with a Digital Output

Connections can be made with equipment that is equipped with a digital interface compliant with the DVI (Digital Visual Interface) standard.

- The RGB 1 IN connector also accepts a DVI-D cable.

- Input TMDS signals conforming to DVI standards.
- To maintain display quality, use a cable recommended by DVI standards.
- The AUDIO IN 1, 2 and 3 can be used for audio input. For connection, select AUDIO 1, 2 or 3 from the AUDIO INPUT button.

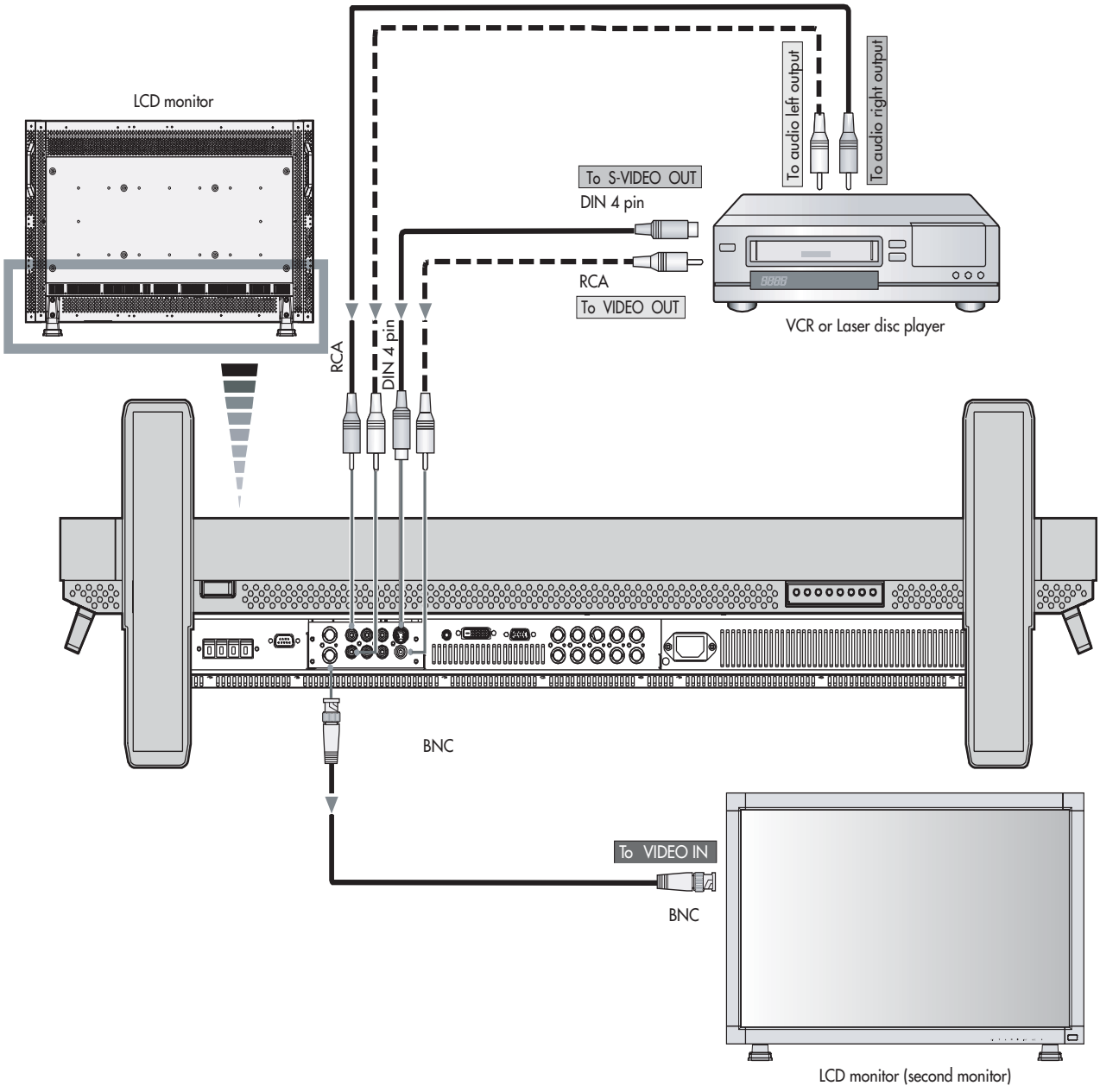

LCD monitor
To audio output
To DVI output
DVI-D connector
DVI-D connector
Equipment with a digital interface such as a personal computer with RGB output (TMDS)

Connections *–continued*

Connecting to a VCR or Laser Disc Player

Connecting your VCR or laser disc player to your LCD monitor will enable you to display your VCR or laser disc player video.
Refer to your VCR or laser disc player owner's manual for more information.

- Video signals can be connected to either the VIDEO IN [RCA or BNC] or the S-VIDEO IN connector.
  NOTE: If S-VIDEO and RCA are both connected, S-VIDEO will have priority.
- Video output will be from the OUT connector that has been set here.
- When connecting one or more LCD monitors, use the VIDEO OUT connectors (BNC).
- The AUDIO IN 2 and 3 can be both used for audio input. For connection, select [AUDIO 2] or [AUDIO 3] from the AUDIO INPUT button.

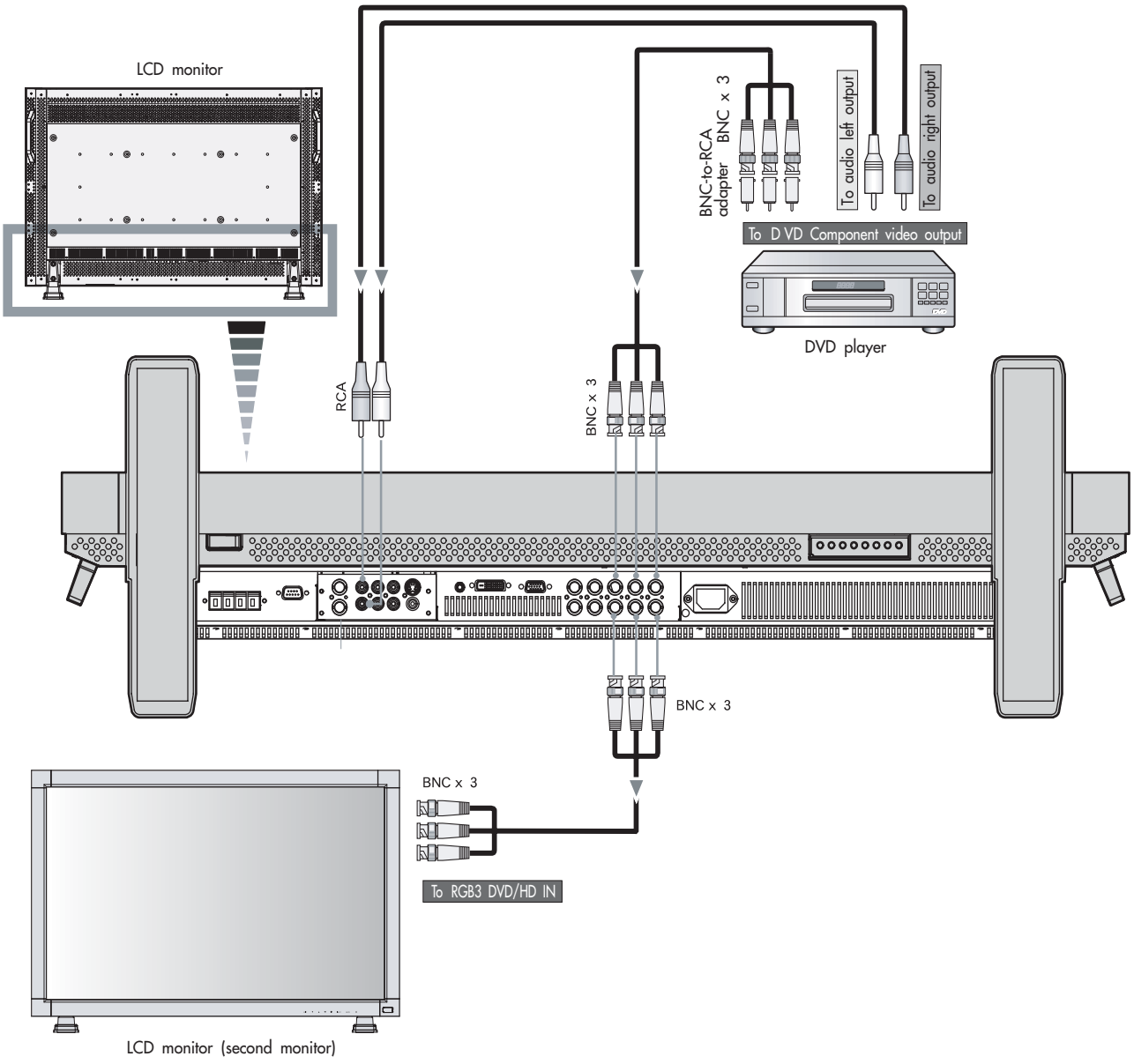


Connections *–continued*

Connecting to a DVD Player

Connecting your DVD player to your LCD monitor will enable you to display your DVD video.
Refer to your DVD player owner's manual for more information.

- To connect the RGB 3 DVD/HD In connector (BNC) on the LCD monitor, use a separately available BNC connector cable. You will need a BNC-to-RCA adapter to connect a DVD player with an RCA pin jack to the BNC connector cable (not provided).
  Some DVD players may have different connectors, such as Cr/Pr, Y and Cb/Pb.
  Select [DVD/HD] input mode from the INPUT button.
  When connecting one or more LCD monitors, use the RGB 3 OUT connectors (BNC).
  The AUDIO IN 2 and 3 (both RCA) can be used for audio input. For connection, select [AUDIO 2] or [AUDIO 3] from the AUDIO INPUT button.

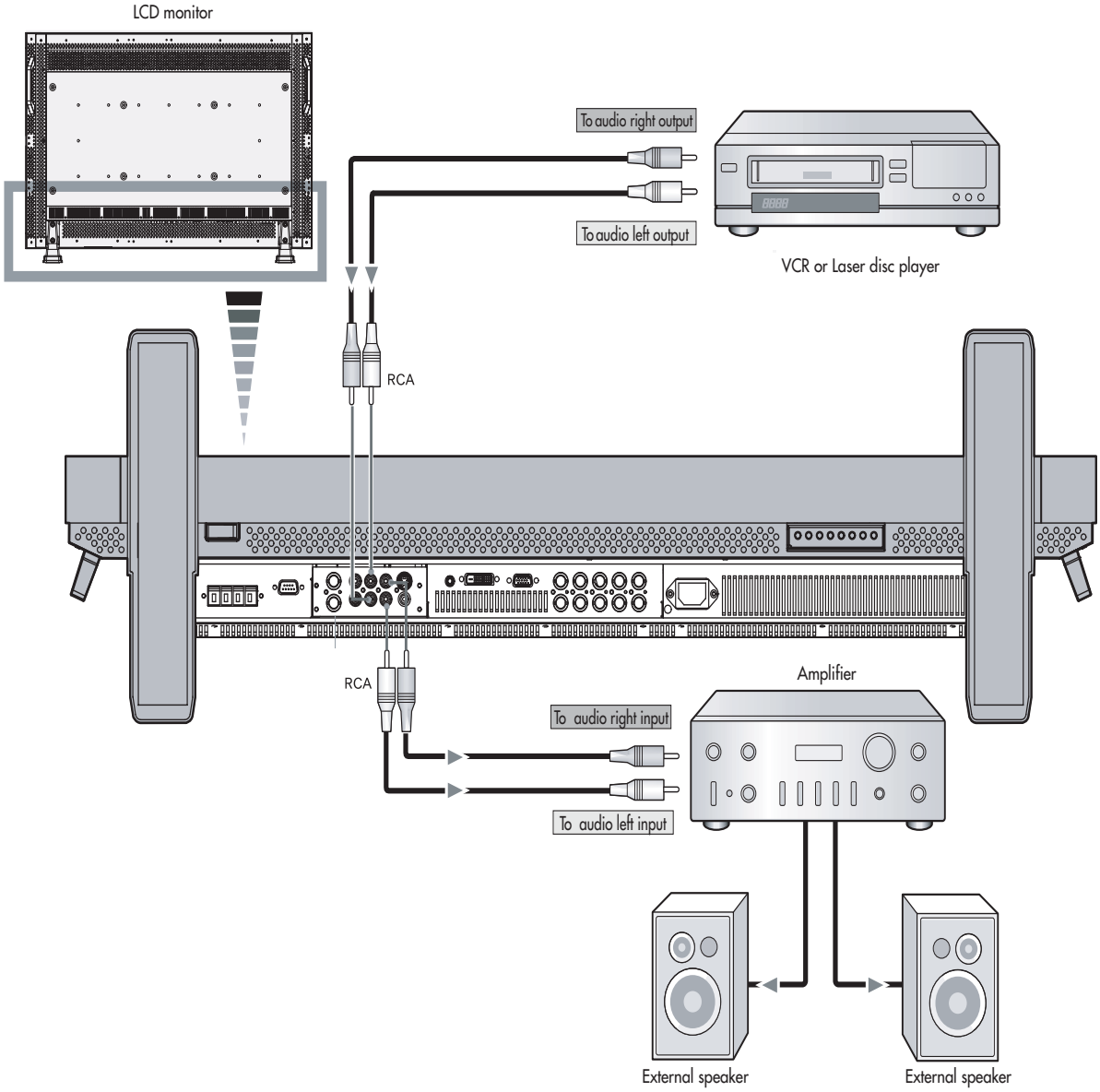


Connections *–continued*

Connecting to a Stereo Amplifier

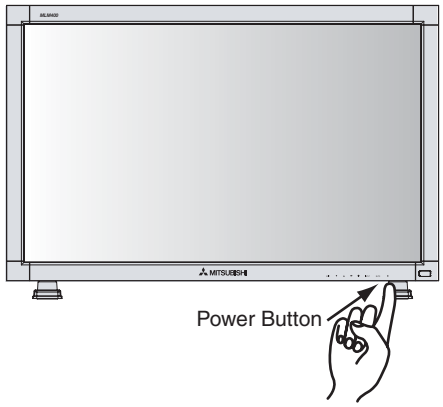
You can connect your stereo amplifier to your LCD monitor. Refer to your amplifier owner's manual for more information.

- Turn on the LCD monitor and the amplifier only after all connections have been made.
- Use an RCA cable to connect the AUDIO OUT connector (RCA) on the LCD monitor and the audio input on the amplifier.
- Do not reverse the audio left and right jacks.
- The AUDIO IN 3 is used for audio input.
- The AUDIO OUT jack outputs sound for the AUDIO IN 3 only.



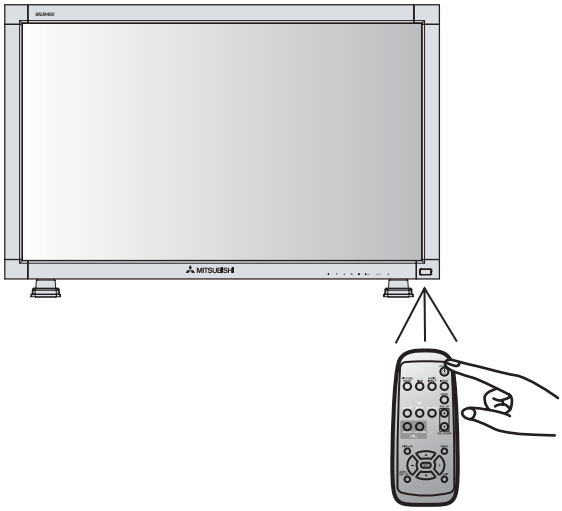
Basic Operation *–Power ON and OFF Modes*

The LCD monitor power indicator will turn green while powered on or red in off mode. The monitor can be powered on or off using the following three options:



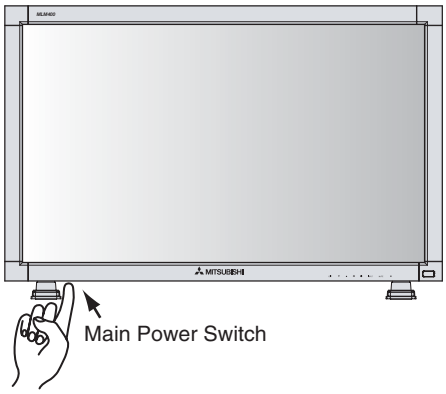
1. Pressing the power button.

NOTE: Before operating the remote control, be sure to turn on the Main Power Switch on the LCD monitor.



2. Using the remote control

NOTE: Before operating the remote control, be sure to turn on the Main Power Switch on the LCD monitor.



3. Pressing the Main Power Switch.

NOTE: When the Main Power Switch is used to power off the LCD, the remote control and the power switch will not activate the on mode. Be sure to turn the Main Power Switch to the on mode before using these two options.

Basic Operation *–continued*

Power Indicator

Power Indicator

	Status
Power ON	Green
Power OFF	Red
Power Standby	Red and Green

When Using Power Management Function

The LCD monitor follows the VESA approved DPMS Power Management function.

The power management function is an energy saving function that automatically reduces the power consumption of the display when the keyboard or the mouse has not been used for a fixed period of time.

Selecting a Video Source

To view a video source:

Use the input button to set [VIDEO].

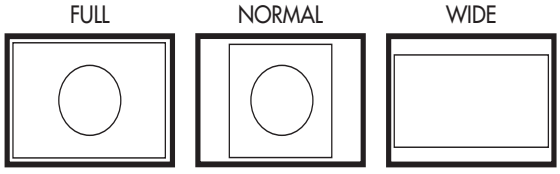
Press the VIDEO button.

Use the COLOR SYSTEM menu to set, [AUTO], [NTSC], [PAL], [SECAM], [PAL60], [4.43NTSC] according to your video format.

Picture Size

RGB 1, 2, 3 FULL* ↔ NORMAL

DVD/HD, VIDEO WIDE → FULL → NORMAL



*__NOTE__: FULL only in W-XGA (1280 x 768) in RGB 1, 2, 3

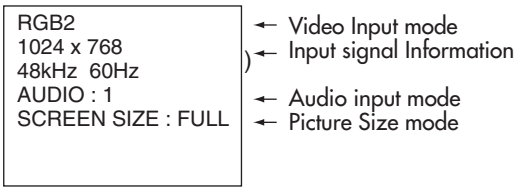
Picture Mode

RGB 1, 2, 3 HIBRIGHT → sRGB → STANDARD

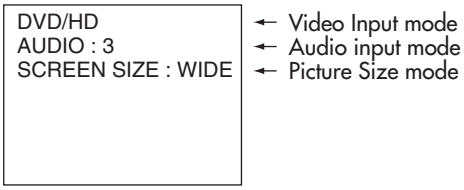
DVD/HD, VIDEO HIBRIGHT → CINEMA → STANDARD

On-screen Menu Information

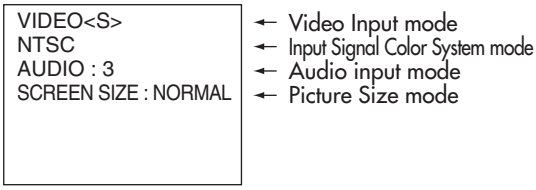
RGB1, 2, 3



DVD/HD



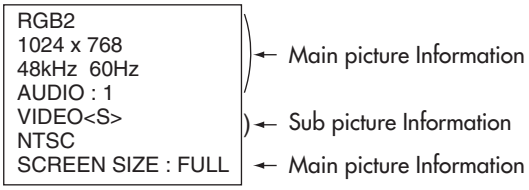
VIDEO



PIP or POP

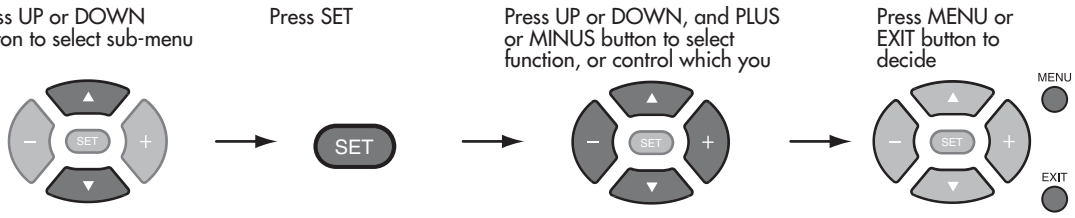
Main:RGB2

Sub:VIDEO<S>

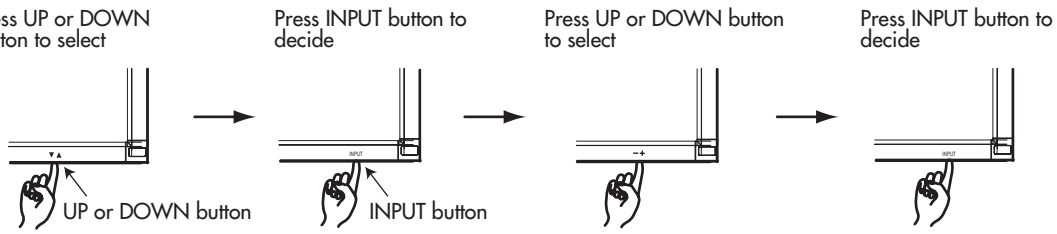


On-Screen Menu Controls *–Computer*

Remote Control


Press UP or DOWN button to select sub-menu
Press SET
Press UP or DOWN, and PLUS or MINUS button to select function, or control which you
Press MENU or EXIT button to decide
SET
MENU
EXIT

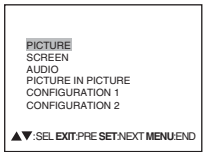
Control Panel

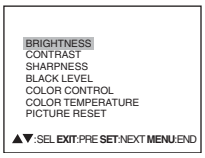
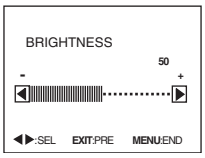
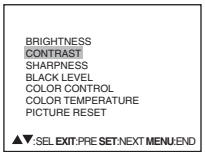
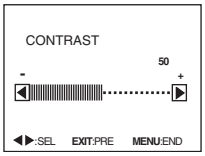
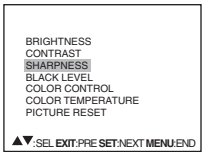
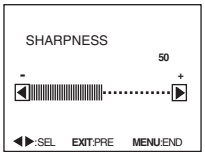
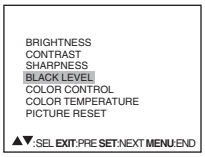
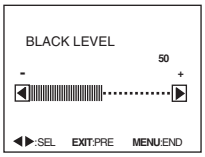
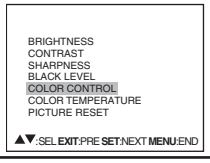
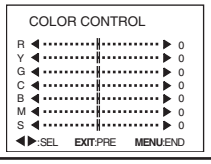

Press UP or DOWN button to select
Press INPUT button to decide
Press UP or DOWN button to select
Press INPUT button to decide
UP or DOWN button
INPUT button

On-screen menu display

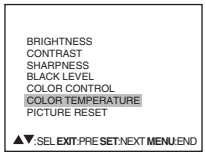
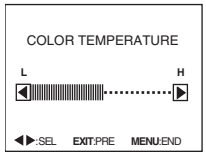
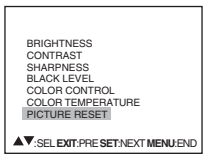
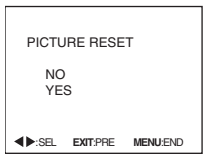
Main-Menu

PICTURE



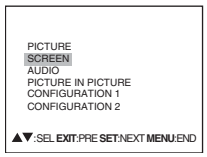
Sub-Menu			
BRIGHTNESS			Adjusts the overall image and background screen brightness. Press + button to increase brightness. Press - button to decrease brightness.
CONTRAST *:INPUT RGB2/3 only			Adjusts the image brightness in relation to the background Press + button to increase contrast. Press - button to decrease contrast.
SHARPNESS *:INPUT RGB2/3 only			Adjusts the picture to get a distinct image or a soft one. Press + button to increase sharpness. Press - button to decrease sharpness.
BLACK LEVEL *:INPUT RGB2/3 only			Press + button to increase black level. Press - button to decrease black level.
COLOR CONTROL			Six color presets select the desired color setting. Color temperature increases or decreases, in each preset. R, Y, G, C, B, M, S: Increases or decreases Red, Yellow, Green, Cyan, Blue Magenta and Saturation depending upon which is selected. The change in color will appear on screen and the direction (increase or decrease) will be shown by the color bars.

On-screen Menu Controls *–Computer continued*

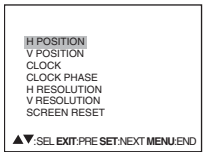
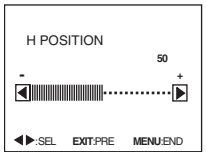
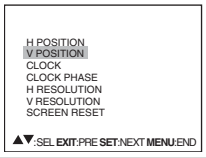
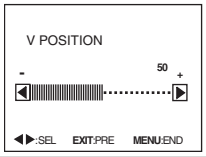
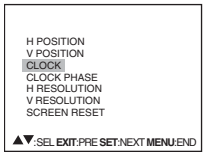
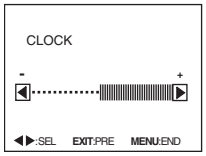
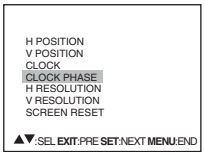
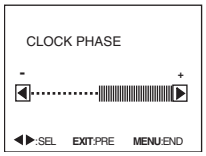
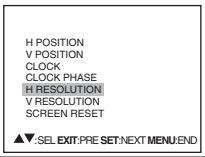
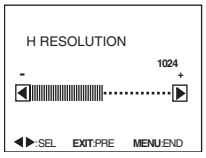
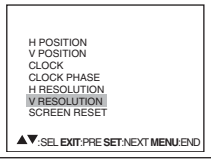
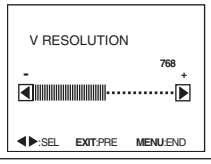
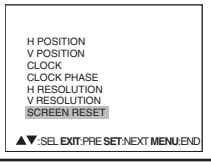
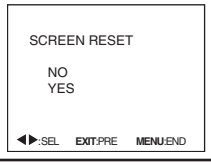
COLOR TEMPERATURE			To adjust the color temperature of entire screen. Adjusting lower color temperature make the screen reddish and adjusting higher color temperature make the screen bluish.
PICTURE RESET			Selecting Picture Reset allows you to restore all PICTURE settings to the factory default position. Select "Yes" and press "SET" button to decide to restore to the factory default.

Main-Menu

SCREEN



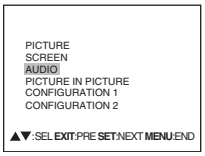
Sub-Menu

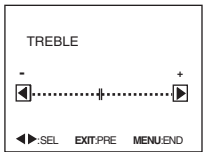
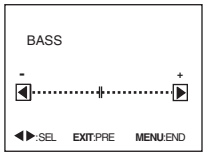
H POSITION			Controls Horizontal Image position within the display area of the LCD. Press + button to move screen to right. Press - button to move screen to left.
V POSITION			Controls Vertical Image position within the display area of the LCD. Press + button to move screen to UP. Press - button to move screen to DOWN.
CLOCK *:INPUT RGB2/3 only			Press + button to expand the width of the image on the screen the right. Press - button to narrow the width of the image on the screen the left.
CLOCK PHASE *:INPUT RGB2/3 only			To change the snow noise of the image.
H RESOLUTION			Adjusts the horizontal size by increasing or decreasing the setting. Press + button to expand the width of the image on the screen. Press - button to narrow the width of the image on the screen.
V RESOLUTION			Adjusts the vertical size by increasing or decreasing the setting. Press + button to expand the height of the image on the screen. Press - button to narrow the height of the image on the screen.
SCREEN RESET			Selecting Screen Reset allows you to restore all SCREEN settings to the factory default position. Select "Yes" and press "SET" button to decide to restore to factory preset.

On-screen Menu Controls –Computer continued

Main-Menu

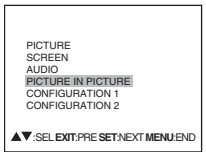
AUDIO

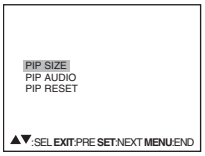
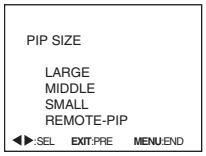
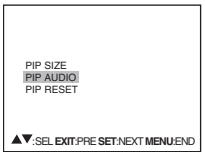
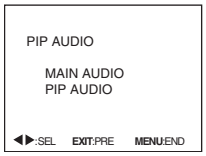
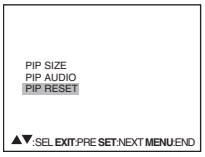
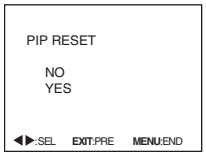


Sub-Menu			
TREBLE			To accentuate or control the high frequency sound. Press + button to increase TREBLE sound. Press - button to decrease TREBLE sound.
BASS			To accentuate or control the low frequency sound. Press + button to increase BASS sound. Press - button to decrease BASS sound.
AUDIO RESET			Selecting Audio Reset allows you to restore all AUDIO settings to the factory default position. Select "Yes" and press "SET" button to decide to restore to factory default.

Main-Menu

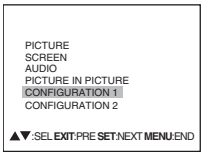
PICTURE IN PICTURE

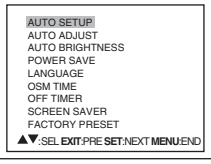
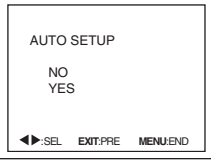
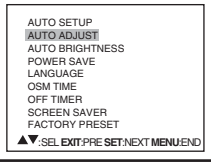
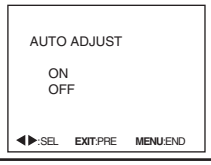


Sub-Menu			
PIP SIZE			Selecting the size of picture inserted at the 'Picture-in Picture' (PIP) mode. 'Large', 'Middle', 'Small' and 'REMOTE-PIP' are available.
PIP AUDIO			Selecting the sound source at the PIP mode. When selecting 'MAIN AUDIO', you will get the sound for the main picture and when selecting 'PIP AUDIO', you will get the sound for the PIP window.
PIP RESET			Selecting PIP Reset allows you to restore all PIP settings to the factory default position. Select 'Yes' and press 'SET' button to decide to restore to factory deafult.

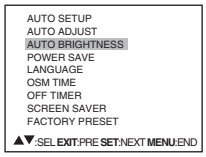
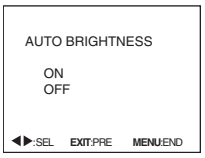
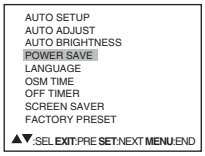
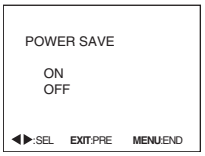
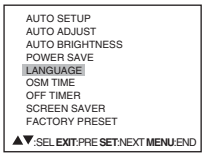
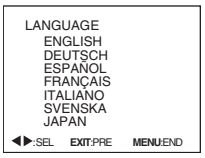
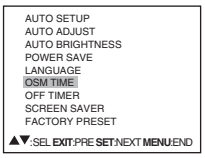
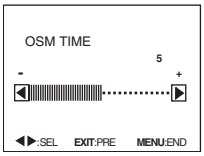
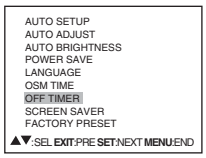
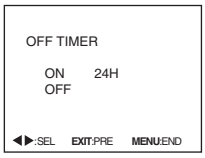
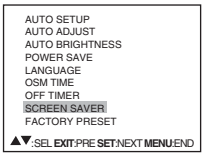
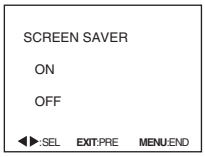
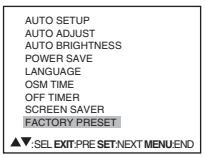
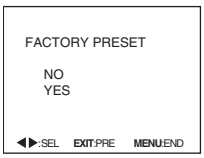
Main-Menu

CONFIGURATION 1



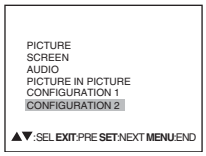
Sub-Menu			
AUTO SETUP *:INPUT RGB2/3 only			Select 'Yes' and press 'SET' button to automatically adjust horizontal position, vertical position, clock, clock-phase, black level.
AUTO ADJUST *:INPUT RGB2/3 only			Selecting the auto adjust ON/OFF. When selecting ON, the clock-phase will adjust automatically.

On-screen Menu Controls *–Computer continued*

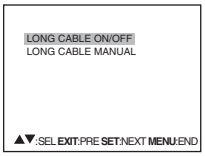
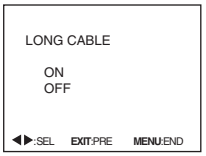
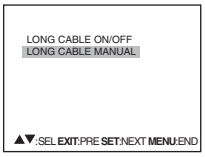
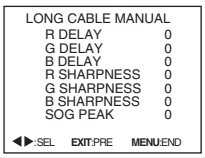
AUTO BRIGHTNESS *:INPUT RGB2/3 only			Selecting the Auto Brightness ON/OFF. When selecting 'ON', the Brightness will adjust automatically.
POWER SAVE			Selecting the power management ON/OFF mode.
LANGUAGE			On-screen control menus are available in seven languages.
OSM TIME			In the on-screen Time menu, you can select how long the on-screen information appears, when the Display key is pressed. Times from 3 to 30 seconds is available.
OFF TIMER			In the OFF TIMER menu, you can preset the monitor to automatically power down. A time between 1 to 24 hours is available.
SCREEN SAVER			To select SCREEN SAVER mode, select ON/OFF
FACTORY PRESET			Selecting YES allows you to reset all on-screen control settings back to the factory default position.

Main-Menu

CONFIGURATION 2



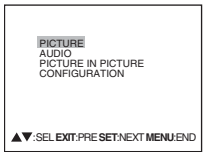
Sub-Menu

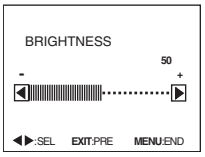
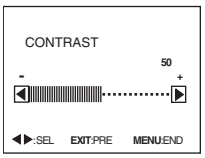
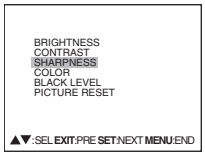
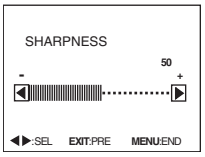
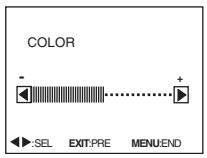
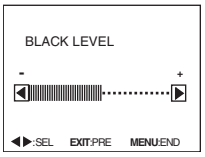
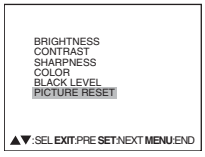
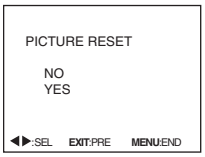
LONG CABLE ON/OFF *:INPUT RGB2/3 only			Automatic compensation for long cables can be performed. When ON, compensation is set automatically. Please refer to the CD-ROM included for alteration.
LONG CABLE MANUAL *:INPUT RGB2/3 only			Image-quality degradation caused by the use of a long cable is reduced with signal optimization.

On-screen Menu Controls –DVD & HD

Main-Menu

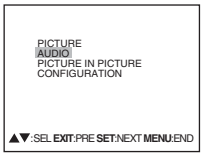
PICTURE

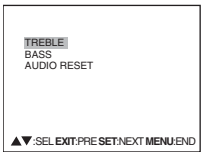
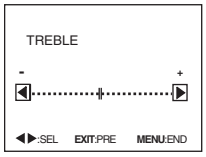
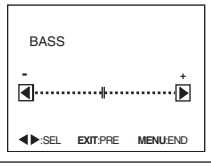


Sub-Menu			
BRIGHTNESS			Adjusts the overall image and background screen brightness. Press + button to increase brightness. Press - button to decrease brightness.
CONTRAST			Adjusts the image brightness in relation to the back ground Press + button to increase contrast. Press - button to decrease contrast.
SHARPNESS			Adjusts the picture to get a distinct image or a soft one. Press + button to increase sharpness. Press - button to decrease sharpness.
COLOR			Adjust the color depth of the screen. Press + button to increase color depth. Press - button to decrease color depth.
BLACK LEVEL			Press + button to increase black level. Press - button to decrease black level.
PICTURE RESET			Selecting Picture Reset allows you to reset all Picture settings to the factory default position. Select "Yes" and press "SET" button to restore to factory default setting.

Main-Menu

AUDIO

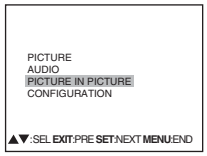


Sub-Menu			
TREBLE			To accentuate or quiet the high frequency sound. Press + button to increase TREBLE sound. Press - button to decrease TREBLE sound.
BASS			To accentuate or quiet the low frequency sound. Press + button to increase BASS sound. Press - button to decrease BASS sound.
AUDIO RESET			Selecting Audio Reset allows you to reset all AUDIO settings to the factory default. Select "Yes" and press "SET" button to restore factory preset.

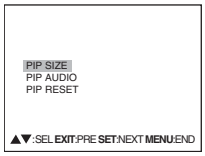
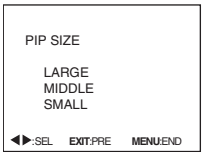
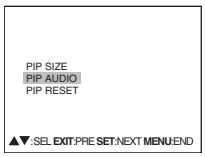
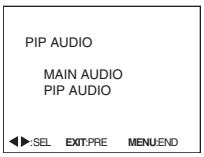
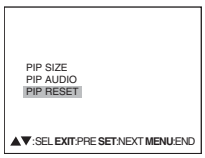
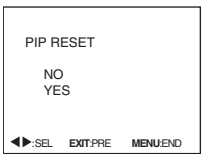
On-screen Menu Controls *–DVD & HD continued*

Main-Menu

PICTURE IN PICTURE

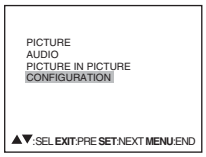


Sub-Menu

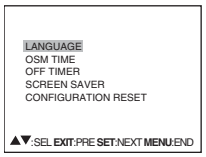
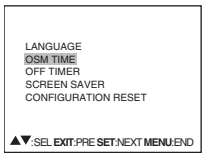
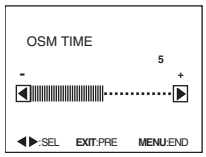
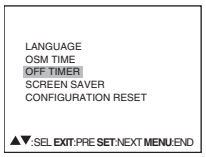
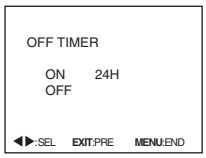
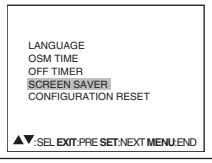
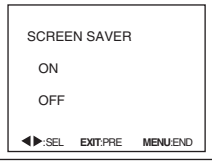
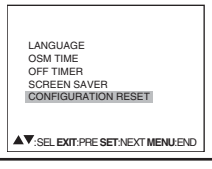
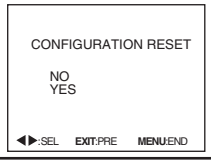
PIP SIZE			Selecting the size of picture inserted at the 'Picture-in Picture' (PIP) mode. 'Large', 'Middle', and 'Small' are available.
PIP AUDIO			Selecting the sound source at the PIP mode. When selecting 'MAIN AUDIO', you get the sound for the main picture and when selecting 'PIP AUDIO', you get the sound for the PIP window.
PIP RESET			Selecting PIP Reset allows you to restore all PIP settings to the factory default position. Select 'Yes' and press the 'SET' button to restore the factory default.

Main-Menu

CONFIGURATION



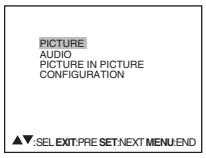
Sub-Menu

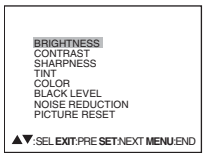
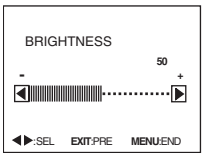
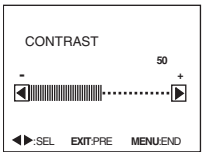
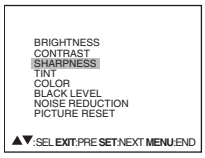
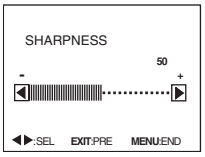
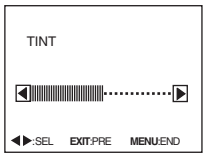
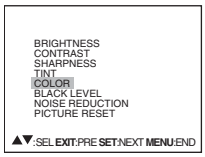
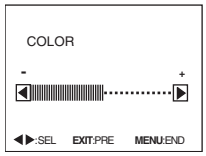
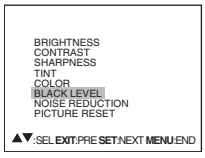
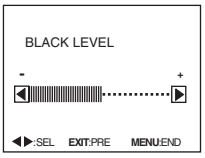
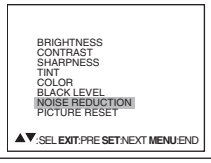
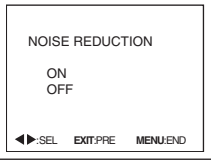
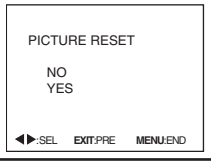
LANGUAGE			On-screen control menus are available in seven languages.
OSM TIME			In the on-screen Time menu, you can select how long the on-screen information disappear after the Display key is pushed. A time between 3 to 30 seconds is available.
OFF TIMER			To select OFF TIMER mode ON/OFF. In the OFF TIMER menu, you can preset the monitor to automatically power down. A time between 1 to 24 hours is available.
SCREEN SAVER			To select SCREEN SAVER mode, select ON/OFF
CONFIGURATION RESET			Selecting the configuration reset allow you to restore all configuration settings to the factory default position. Select 'Yes' and press 'SET' button to decide to restore to factory default.

On-screen Menu Controls *–AV Input*

Main-Menu

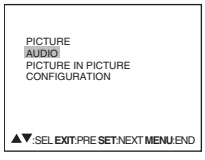
PICTURE

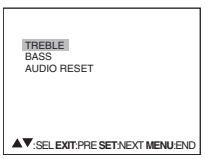
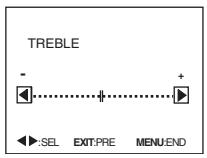


Sub-Menu			
BRIGHTNESS			Adjusts the overall image and background screen brightness. Press + button to increase brightness. Press - button to decrease brightness.
CONTRAST			Adjusts the image brightness in relation to the background Press + button to increase contrast. Press - button to decrease contrast.
SHARPNESS			Adjusts the picture to get a distinct image or soft one. Press + button to increase sharpness. Press - button to decrease sharpness.
TINT			Adjust the tint of the screen. Press + button the flesh tone color becomes greenish. Press - button the flesh tone color becomes purplish.
COLOR			Adjust the color depth of the screen. Press + button to increase color depth. Press - button to decrease color depth.
BLACK LEVEL			Press + button to increase black level. Press - button to decrease black level.
NOISE REDUCTION			Activates automatic noise reduction function.
PICTURE RESET			Selecting Picture reset allows you to reset all Picture settings to factory default position. Select "Yes" and press "SET" button to decide to restore to factory defaults.

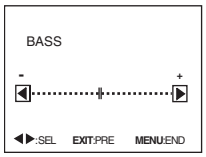
Main-Menu

AUDIO



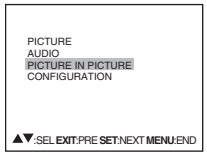
Sub-Menu			
TREBLE			To accentuate or control the high frequency sound. Press + button to increase TREBLE sound. Press - button to decrease TREBLE sound.

On-screen Menu Controls –AV Input continued

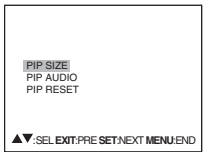
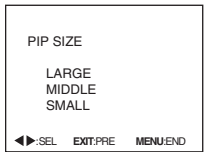
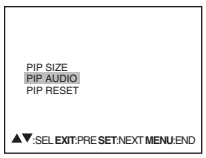
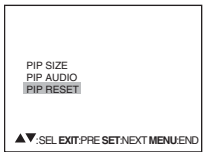
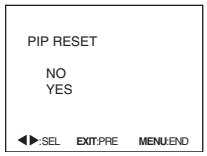
BASS			To accentuate or control the low frequency sound. Press + button to increase BASS sound. Press - button to decrease BASS sound.
AUDIO RESET			Selecting Audio Reset allows you to reset all AUDIO settings to the factory default position. Select "Yes" and press "SET" button to decide to restore to factory default.

Main-Menu

PICTURE IN PICTURE

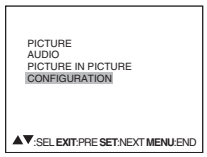


Sub-Menu

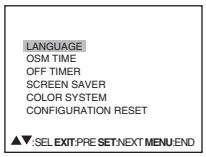
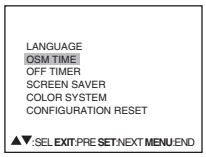
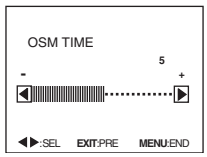
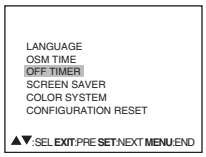
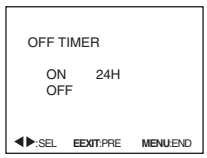
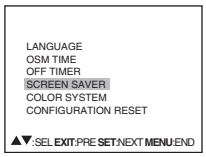
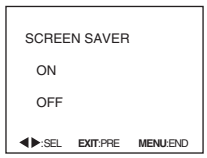
PIP SIZE			Selecting the size of picture inserted at the 'Picture-in Picture' (PIP) mode. 'Large', 'Middle', and 'Small' are available.
PIP AUDIO			Selecting the sound source at the PIP mode. When selecting 'MAIN AUDIO', you get the sound for the main picture and when selecting 'PIP AUDIO', you get the sound for the picture inserted.
PIP RESET			Selecting PIP reset allows you to reset all PIP settings to factory default position. Select 'Yes' and press 'SET' button to decide to restore to factory defaults.

Main-Menu

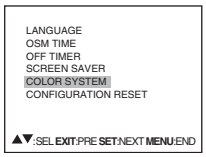
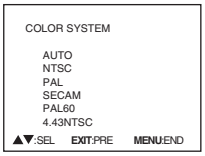
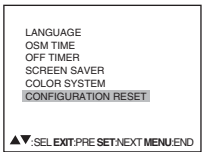
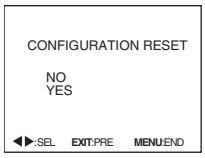
CONFIGURATION



Sub-Menu

LANGUAGE			on-screen menus are available in seven languages.
OSM TIME			In the on-screen Time menu, you can select how long the display remains on the screen after pressing the Display button. A time between 3 to 30 seconds is available.
OFF TIMER			To select OFF TIMER mode ON/OFF. In the OFF TIMER menu, you can select how long monitor auto turn off time after monitor turn on.
SCREEN SAVER			To select SCREEN SAVER mode, select ON/OFF

On-screen Menu Controls *–AV Input continued*

COLOR SYSTEM			Selecting the Color System depends on your input video format. AUTO: NTSC, PAL, SECAM, PAL60 or 4.43NTSC is automatically selected. NTSC: Specific selection of NTSC PAL: Specific selection of PAL SECAM: Specific selection of SECAM PAL60: Specific selection of PAL60 4.43NTSC: Specific selection of 4.43NTSC
CONFIGURATION RESET			Selecting the Configuration Reset allows you to reset all configuration settings to the factory default position. Select 'Yes' and press 'SET' button to restore the factory presets.

Using the LCD with a Personal Computer (PC)

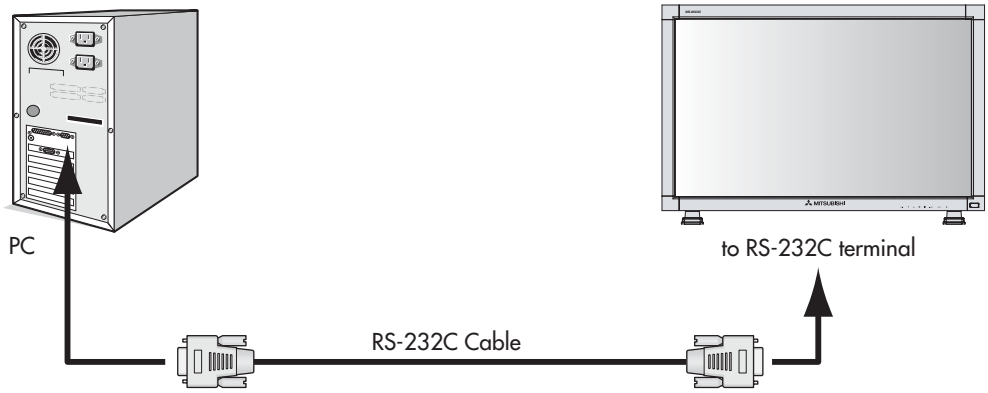
This LCD monitor can be controlled by connecting a personal computer with a RS-232C terminal.

Functions that can be controlled by a personal computer are:

- Power ON or OFF
- Switching between input signals

Connection

LCD Monitor + PC



Note: If your PC (IBM or IBM compatible) is equipped only with a 25-pin serial port connector, a 25-pin serial port adapter is required. Contact your dealer for details.

1) Interface

PROTOCOL	RS-232C
BAUD RATE	9600 [bps]
DATA LENGTH	8 [bits]
PARITY BIT	NONE
STOP BIT	1 [bits]
FLOW CONTROL	NONE

This LCD monitor uses RXD, TXD and GND lines for RS-232C control.
For RS-232C cable, the reverse type cable should be used.

2) Control command diagram

The command is structured by the address code, function code, data code and end code. The length of the command is different for each function.

	Address code	Function code	Data code	End code
HEX	30h 30h	Function	Data	0Dh
ASCII	'0' '0'	Function	Data	↵

[Address code] 30h 30h (In ASCII code, '0' '0') fixed.
[Function code] A code of each fixed control move.
[Data code] A code of each fixed control data (number) and not always indicated.
[End code] 0Dh (In ASCII code, ' ↵ ') fixed.

3) Control sequence

(1) The command from a personal computer to the LCD monitor will be sent in 400ms.
(2) The LCD monitor will send a return command 400ms* after it has received an encode. If the command isn't received correctly, the LCD monitor will not send the return command.
(3) The personal computer checks the command and confirms if the command which has been sent has been executed or not.
(4) This LCD monitor sends various codes other than return code. When having a control sequence by RS-232C, reject other codes from personal computers side.

Using the LCD with a Personal Computer *–continued*

3) Control sequence (continued)

*: The sending time of return command may delay depending on the condition (during changing of the input signal, etc.).

[Example] Turn the power ON (' ' is for ASCII code)

Sending commands from the PC etc.	Status code from LCD monitor	Meaning
30 30 21 0D '0' '0' '!' '↵'		Command for POWER ON
	30 30 21 0D '0' '0' '!' '↵'	Command received (Command echo back)

4) Operation commands

The operation commands execute the basic operation setting of this LCD monitor.
It may not operate when changing the signal:

Operation	ASCII	HEX
POWER ON	!	21h
POWER OFF	"	22h
INPUT RGB 1	_r1	5Fh 72h 31h
INPUT RGB 2	_r2	5Fh 72h 32h
INPUT RGB 3	_r3	5Fh 72h 33h
INPUT VIDEO	_v1	5Fh 76h 31h
INPUT DVD/HD	_v2	5Fh 76h 32h

- POWER OFF command will not work for 1 minute after the power is turned on.
- POWER ON command will not work for 1 minute after the power is turned off.

5) Read command

Host computer sends the command without Data-code to monitor.
After receiving this command, the monitor returns the command with Data-code of current status to host computer.
< ex. > When Host computer ask Power status of monitor, the status of monitor is powered-on.

Command from computer	Command from Monitor	Detail of command
30 30 76 50 0D '0''0'v''P'[enter]		Ask about the power status of monitor.
	30 30 76 50 31 0D '0''0''v''P''1'[enter]	Monitor is powered-on.

Structure of the Read-command

			ASCII		HEX	
			Function	Data(Receive)	Function	Data(Receive)
Power	ON		vP	1	76 50	31
	OFF(stand by)		vP	0	76 50	30
Input	RGB-1(DVI-D)		vI	r1	76 49	72 31
	RGB-2(D-SUB)		vI	r2	76 49	72 32
	RGB-3(BNC)		vI	r3	76 49	72 33
	Video		vI	v1	76 49	76 31
	DVD/HD		vI	v2	76 49	76 32
Picture mode	HIBRIGHT		vM	p1	76 4D	70 31
	STANDARD		vM	p2	76 4D	70 32
Temperature of Internal monitor	Around Power PCB	resolution 0.5°C	tcx1	(ex.) + 25.0	74 63 78 31	2B 20 32 35 2E 30
		resolution 1°C	tc1	(ex.) + 25	74 63 31	2B 20 32 35
	Around Inverter PCB	resolution 0.5°C	tcx2	(ex.) + 30.5	74 63 78 31	2B 20 33 30 2E 35
		resolution 1°C	tc2	(ex.) + 31	74 63 32	2B 20 33 31

Features

40" diagonal screen size adds a new option to information display visual offerings.

1280 x 768 resolution allows for crisp text and precise images.

No permanent phosphor image burn-in contributes to optimal screen performance and longer monitor life.

Wide viewing angle

DDC/CI capabilities allow control commands to be sent directly to the monitor through a standard PC or over an existing network by a system administrator.

Automatic long cable compensation prevents image quality degradation caused by long cable lengths.

User-friendly, efficient design features the currently proposed VESA-standard mounting and an overall lightweight construction for easy transport and installation.

Optional detachable speakers deliver an enhanced multimedia experience with amazing sound quality.

Low power consumption and reduced heat emission lead to a lower total cost of ownership.

On Screen Menu puts you in complete control of display setting adjustments.

Mitsubishi's quality and reliability provide peace of mind with a 1-year warranty (including backlight) and customer service and technical support.

Control System with sRGB allows you to change between the color settings on your display to match your personal preference.

Plug and Play: The Microsoft® solution with the Windows®95/98/ME/2000/XP operating system facilitates setup and installation by allowing the monitor to send its capabilities (such as screen size and resolutions supported) directly to your computer, automatically optimizing display performance.

Power Management System provides innovative power-saving methods, saving two-thirds of your monitor energy costs.

Multiple Frequency Technology automatically adjusts monitor to the display card's scanning frequency, thus displaying the resolution required.

Full-screen Capability allows you to use the entire screen area in most resolutions, significantly expanding image size.

VESA Standard Mounting Interface allows users to connect their LCD monitor to any VESA standard third party mounting arm or bracket. Allows for the monitor to be mounted on a wall or an arm using any third party compliant device. Mitsubishi recommends using mounting interface that comply with UL1678 standard in North America.

DVI-D: The digital-only subset of DVI created by the Digital Display Working Group (DDWG) for digital connections between computers and displays. As a digital-only connector, analog support is not provided off a DVI-D connector. As a DVI-based digital only connection, only a simple adapter is necessary for compatibility between DVI-D and other DVI-based digital connectors such as DFP and P&D.

Troubleshooting

No picture

- The signal cable should be completely connected to the display card/computer.
- The display card should be completely seated in its slot.
- Front Power Switch and computer power switch should be in the ON position.
- Main Power Switch should be in the ON position (see Page 5 for the location of this switch)
- Check to make sure that a supported mode has been selected on the display card or system being used. (Please consult display card or system manual to change graphics mode.)
- Check the monitor and your display card with respect to compatibility and recommended settings.
- Check the signal cable connector for bent or pushed-in pins.

Power Button does not respond

- Unplug the power cord of the monitor from the AC outlet to turn off and reset the monitor.

Image persistence

- Image persistence is when a residual or "ghost" image of a previous image remains visible on the screen. Unlike CRT monitors, LCD monitors image persistence is not permanent, but constant images being displayed for a long period of time should be avoided. To alleviate image persistence, turn off the monitor for as long as the previous image was displayed. For example, if an image was on the monitor for one hour and a residual image remains, the monitor should be turned off for one hour to erase the image.

NOTE: As with all personal display devices, Mitsubishi Digital Electronics recommends using a moving screen saver at regular intervals whenever the screen is idle or turning off the monitor when not in use.

Image is unstable, unfocused or swimming is apparent

- Signal cable should be completely attached to the computer.
- Use the on-screen controls to focus and adjust display by increasing or decreasing the clock phase total. When the display mode is changed, the on-screen Image Adjust settings may need to be readjusted.
- Check the monitor and your display card with respect to compatibility and recommended signal timings.
- If your text is garbled, change the video mode to non-interlace and use 60Hz refresh rate.

Image of component signal is greenish

- Check to see if the DVD/HD input connector is selected.

LED on monitor is not lit (no green or red color can be seen)

- Power Switch should be in the ON position and power cord should be connected.
- Make certain the computer is not in a power-saving mode (touch the keyboard or mouse).

Display image is not sized properly

- Use the on-screen controls to increase or decrease the clock total.
- Check to make sure that a supported mode has been selected on the display card or system being used. (Please consult display card or system manual to change graphics mode.)

Selected resolution is not displayed properly

- Use on-screen menu to enter Information menu and confirm that the appropriate resolution has been selected. If not, select corresponding option.

No Sound

- Check to see if speaker cable is properly connected.
- Check to see if mute is activated.
- Check to see if volume is set at minimum.

Remote Control is not available

- Test the Remote Control's batteries for strength/life.
- Check if the batteries are inserted correctly.
- Check if the Remote Control is pointed at the monitor's remote sensor.
- Check if that the Main Power Switch is in the ON position (see Page 5 and Page 17)

Light vertical or horizontal stripes may appear depending on different display patterns.

References

Mitsubishi 40" LCD Monitor Customer Service & Support

Customer Service and Technical Support:		(888) 307-0309
	Fax:	(949) 859-4770
Parts and Accessories/Macintosh Cable Adapter:		(888) 307-0309
Customer Service Policies & Processes:		http://www.mitsubishi-presentations.com
Online Technical Support Knowledge Base:		http://www.mitsubishi-presentations.com
Customer Service & Technical Support Email:		tsupport@mdea.com

Sales and Product Information

Sales Information Line	(888) 307-0357
Government Sales	(888) 307-0308
Government Sales	email: vlangan@mdea.com

Special Offer Status Information

Mitsubishi Offer Status	877-405-4692

Electronic Channels

World Wide Web:	http://www.mitsubishi-presentations.com
Product Registration:	http://www.mitsubishi-presentations.com

Windows® 95/98/Me/2000/XP INF File: http://www.mitsubishi-presentations.com and select "Technical Support"

Specifications

		Analog Input	Digital Input
LCD Module		(40" / 101.6cm diagonal)	
	Pixel Pitch	0.681mm	
	Resolution	1280 x 768 dots (WXGA)	
	Color	Over 16 million colors	
	Brightness	450cd/m2 (Typ.)	
	Viewing Angle	Up 85 / Down 85 / Left 85 / Right 85 (typ) @ CR >10	
External speaker output inpedance		Rating 7W x 7W (8 Ohm)	
Frequency	**Horizontal**	31.5kHz - 49.0kHz, 64.0kHz:SXGA, 75.0kHz: UXGA	31.5kHz - 48.4kHz
	Vertical	58.0 - 62.0 Hz	58.0 - 62.0 Hz
Pixel Clock		25.0MHz - 162.0MHz	25.0MHz - 65.0MHz
Viewable Size		871.68 x 523.008mm	
Input Signal	**PC Input**		
	Video	Analog RGB 0.7V p-p	TMDS
		Input Impedance 75 Ohm Composite sync on Green Video : 0.3Vp-p Nega (video 0.7Vp-p Positive)	
	Sync	Separate : TTL level (Positive / Negative), Input Impedance 2.2k Ohm	
	Input terminal	BNC (R,G,B,H,V)	DVI-D (Digital)
	Signal cable	15pin Mini D-sub	
	VIDEO Input	Composite 1.0V p-p Input Impedance 75 Ohm BNC and RCA-INPUT Y/C Y:0.7V p-p C:0.283V p-p Input Impedance 75 Ohm S-TERMINAL-INPUT Component 1.0/0.7V p-p Input Impedance 75 Ohm BNC-INPUT	
	AUDIO Input	RCA PIN-JACK L/R 2INPUT, STEREO Mini Jack 1INPUT	
	Control Input	9 Pin Mini D-sub (RS-232C)	
Power Supply		2.5A @ 100-120V, 1.1A @ 220V-240V	
Operational	**Temperature**	5 - 40 deg C	
Environment	**Humidity**	10 - 80% (without condensation)	
Storage	**Temperature**	-20 - 60 deg C	
Environment	**Humidity**	10 - 90% (without condensation) / below 60% over 40 deg C	
Dimension	**Net**	949 (W) x 605 (H)x 141 (D) mm (without Stand), 949 (W) x 643.9 (H) x 306 (D) mm (with Stand)	
	Gross	1125 (W) x 770 (H) x 261 (D) mm	
Weight	**Net**	69.4 lbs / 27.5kg	
	Gross	82.7 lbs / 33.5kg	
VESA compatible arm		3 x 200mm x 100mm (8 Holes)	
mounting interface		2 x 200mm x 100mm (6 Holes)	
Complied Regulatory and		UL 60950/CSA C22.2 No.60950	
Guidelines		FCC-B	
Power Management		VESA DPMS	
Plug & Play		VESA DDC2B, DDC/CI	
Resolutions Supported		640 x 480 at 60 Hz 800 x 600 at 60 Hz 1024 x 768 at 60 Hz Mitsubishi Digtial Electronics cites recommended resolution 1280 x 768 at 60 Hz .....at 60 Hz for optimal display performance. NTSC / PAL HDTV: 480i, 480p, 720p, 1080i	
Accessories		User's manual, Power Cord, Video Signal Cable, Remote Control, AA Battery x 2, Clamper x 2, Screw x 2, CD-ROM, Ferrite Core x 4, Stand for the Independence x 2, Screw (M5 x 40) for stand x 4, Band x 3	

Limited Warranty for LCD Monitors

(Applicable only for Customers who bought and used their products within US Territories)

1. Subject to the terms and conditions in this limited warranty, MITSUBISHI DIGITAL ELECTRONICS AMERICA, INC. ("MDEA") warrants to the original purchaser at retail (the "Purchaser") of this LCD MONITOR that should, in MDEA's judgment, the LCD Monitor prove to be defective by reason of improper workmanship and/or materials, MDEA shall repair or replace, at its option, any defective part of the LCD Monitor without charge for the **part(s)** and shall, bear the entire **labor expense** for any warranty repair for a period of **one year from the date of purchase by the Purchaser** as indicated in the sales invoice, or proof of purchase of the defective LCD Monitor when such labor is performed at an authorized MDEA service center.

1.A All parts used for replacement are warranted for the remainder of the original warranty period only. To obtain warranty service, the Purchaser must notify an authorized MDEA service center of any alleged defect within the applicable warranty period.

1.B. LCD Monitor serviced under this limited warranty shall, at MDEA's option, be returned in new or used generic cartons/packing.

1.C MDEA reserves the right to request the return of the defective part or product unit being replaced. Failure to return the defective part or product unit upon request by MDEA may result in MDEA charging the purchaser the full retail price of the replacement part or product unit.

2. PROOF OF PURCHASE DATE IS REQUIRED WHEN REQUESTING WARRANTY SERVICE. In order to obtain warranty service, the Purchaser must deliver the LCD Monitor to the nearest authorized MDEA service center. Shipping expenses are the Purchaser's responsibility. The name and address of the nearest service center can be obtained from a MDEA dealer or by writing or calling MDEA at the address and telephone number provided below. THE PURCHASER MUST PRESENT TO THE SERVICE CENTER A SALES RECEIPT OR OTHER WRITTEN EVIDENCE ESTABLISHING PROOF AND DATE OF PURCHASE OF THE LCD MONITOR. THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION OF WARRANTY COVERAGE. However, the Purchaser is urged to register their product via the Internet at www.mitsubishi-presentations.com so that, if necessary, MDEA can contact the Purchaser.

3. THIS WARRANTY DOES NOT COVER: Cosmetic damage or damage to this LCD Monitor or to any other products where such damage is caused by unauthorized modification, alteration, repairs to or service of the product by anyone other than an authorized MDEA service center; physical abuse to or misuse of the product (including any failure to carry out any maintenance as described in the Owner's Guide or any product damaged by excessive physical or electrical stress); any products that have had a serial number or any part thereof altered, defaced or removed; product use in any manner contrary to the Owner's Guide (including, but not limited to, imprinted images on the viewing screen); freight damage or damage due to improper shipping methods; damage caused by use of third party mounting brackets or stands or any damage caused by acts of God or other factors beyond the reasonable control of MDEA, such as power surge damage caused by electrical system or lightning. This warranty also excludes service where no defect in the product covered under this warranty is found, service calls related to unsatisfactory audio or visual reception or signal unless caused by a defect in the product that is covered under this warranty, all costs, expenses or any other damages arising from product installation, or set-ups any adjustments of user controls (including, contrast, brightness, color, tint, fine tuning, sharpness), other adjustment necessary to prepare the unit for display or use connection with any external tuner, computer system, audio receiver, antenna, cable or satellite systems, or service of products purchased or serviced outside the U.S.A. Please consult the operating instructions contained in the Owner's Guide furnished with the product for information regarding user controls.

4. ANY EXPRESS WARRANTY NOT PROVIDED IN THIS LIMITED WARRANTY, AND ANY REMEDY WHICH, BUT FOR THIS DISCLAIMER PARAGRAPH, MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW IS HEREBY EXCLUDED AND DISCLAIMED. BY WAY OF EXAMPLE AND NOT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

5. UNDER NO CIRCUMSTANCES SHALL MDEA BE LIABLE TO THE ORIGINAL PURCHASER AT RETAIL OR ANY OTHER PERSON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, OR OTHERWISE.

6. Some states do not allow a disclaimer of implied warranties, or the exclusion or limitation of incidental, special or consequential damages. Consequently, the disclaimer and limitations set forth in Paragraphs 4 and 5 above may not apply to all original purchasers at retail

7. This warranty gives specific legal rights, and the Purchaser may also have other rights, which vary, from state to state.

8. Technical Support can be reached by mail at: Mitsubishi Digital Electronics America, Inc. 9351 Jeronimo Road, Irvine, CA 92618, ATTN: Technical Support - Presentation Products or by email at tsupport@mdea.com.

9. Additional product and technical information can be found at www.mitsubishi-projectors.com or via telephone at:

Product and Dealer Information – (888)-307-0309
Accessories Information – Your local dealer or, (888)-307-0308
Technical Support – (888)-307-0309
National Repair Center – (800)-446-6866

Mitsubishi MLM400

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DECLARATION OF CONFORMITY

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions. (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

U.S. Responsible Party:	**Mitsubishi Digital Electronics America, Inc.**
Address:	**9351 Jeronimo Road Irvine, California 92618**
Tel. No.:	**(949) 465-3000**

Type of Product:	Computer Monitor
Equipment Classification:	Class B Peripheral
Model:	MLM400 (L40HV201)

FC

We hereby declare that the equipment specified above conforms to the technical standards as specified in the FCC Rules.

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